



# Packaged Gas/Electric Rooftop Units

---

**Precedent™**  
**3 - 10Tons — 60 Hz**





## Introduction

---

# Packaged Rooftop Air Conditioners

Through the years, Trane has designed and developed the most complete line of Packaged Rooftop products available in the market today. Trane was the first to introduce the Micro—microelectronic unit controls—and has continued to improve and revolutionize this design concept.

Electromechanical controls are available for simpler applications, and for the more sophisticated, ReliaTel™ microprocessor controls.

The ReliaTel control platform offers the same great features and functionality as the original Micro, with additional benefits for greater application flexibility.

With its sleek compact cabinet, rounded corners and beveled top Precedent continues to provide the highest standards in quality and reliability, comfort, ease of service, and the performance of Trane light commercial products.

Trane customers demand products that provide exceptional reliability, meet stringent performance requirements, and are competitively priced. Trane delivers with Precedent.

Precedent features cutting edge technologies: reliable compressors, Trane engineered ReliaTel controls, computer-aided run testing, and Integrated Comfort™ Systems. So, whether you're the contractor, the engineer, or the owner you can be certain Precedent Products are built to meet your needs.

It's Hard To Stop A Trane.®



# Contents

---

<b>Introduction</b>	2
<b>Features and Benefits</b>	4
<b>Application Considerations</b>	11
<b>Selection Procedure</b>	12
Model Number Description	14
<b>General Data</b>	15
<b>Performance Data</b>	28
Cooling Performance	28
Fan Performance	37
Heating Performance	75
<b>Controls</b>	77
<b>Electric Power</b>	79
<b>Dimension and Weights</b>	86
<b>Mechanical Specifications</b>	95



# Features and Benefits

---

## Factory Installed Options

- Black Epoxy Pre-Coated Coils
- Dehumidification Option
- High Pressure Cutout
- Hinged Access Doors
- Novar Return Air Sensor
- Novar Unit Controls
- Phase Monitor
- Powered or Unpowered Convenience Outlet
- Supply and/or Return Air Smoke Detector
- Thermal Expansion Valve
- Through the Base Electrical Access
- Through the Base Electrical With Circuit Breaker
- Through the Base Electrical With Disconnect Switch
- Two-Inch Pleated Filters

## Factory or Field Installed Options

- Clogged Filter/Fan Failure Switch
- Differential Pressure Switches
- Discharge Air Sensing Kit
- Economizer
- Electric Heaters
- Froststat
- LonTalk® Communications Interface
- Oversized Motors
- Reference or Comparative Enthalpy
- Tool-less Hail Guards
- Trane Communications Interface (TCI)

## Field Installed Options

- CO<sub>2</sub> Sensing
- Digital Display Zone Sensor
- Dual Thermistor Remote Zone Sensor
- High Static Drive
- Humidity Sensor
- Manual Outside Air Damper
- Motorized Outside Air Dampers
- Powered Exhaust
- Remote Potentiometer
- Roof Curb
- Thermostat
- Ventilation Override Accessory
- Zone Sensor

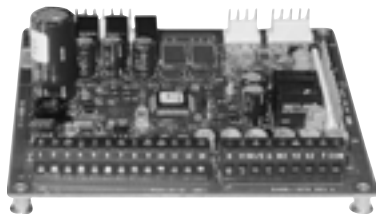
# Features and Benefits

## Easy to Install, Service and Maintain

Because today's owners are very cost-conscious when it comes to service and maintenance, the Trane Precedent was designed with direct input from service contractors. This valuable information helped to design a product that would get the serviceman off the job quicker and save the owner money. Precedent does this by offering:

## Quality and Reliability

### ReliaTel™ Controls (LCI-R)



ReliaTel controls provide unit control for heating, cooling and ventilating utilizing input from sensors that measure outdoor and indoor temperature.

Quality and Reliability are enhanced through ReliaTel control and logic:

- prevents the unit from short cycling, considerably improving compressor life.
- ensures that the compressor will run for a specific amount of time which allows oil to return for better lubrication, enhancing the reliability of the compressor.

Precedent with ReliaTel reduces the number of components required to operate the unit, thereby reducing possibilities for component failure.

### ReliaTel Makes Installing and Servicing Easy

ReliaTel eliminates the need for field installed anti-shortcycle timer and time delay relays. ReliaTel controls provide these functions as an integral part of the unit. The contractor no longer has to purchase these controls as options and pay to install them.

The wiring of the low voltage connections to the unit and the zone sensors is as easy as 1-1, 2-2, and 3-3. This simplified system makes wiring easier for the installer.

### ReliaTel Makes Testing Easy

ReliaTel requires no special tools to run the Precedent unit through its paces. Simply place a jumper between Test 1 and Test 2 terminals on the Low Voltage Terminal Board and the unit will walk through its operational steps automatically.

- The unit automatically returns control to the zone sensor after stepping through the test mode a single time, even if the jumper is left on the unit.

As long as the unit has power and the "system on" LED is lit, ReliaTel is operational. The light indicates that the controls are functioning properly.

ReliaTel features expanded diagnostic capabilities when utilized with Trane Integrated Comfort™ Systems.

Some zone sensor options have central control panel lights which indicate the mode the unit is in and possible diagnostic information (dirty filters for example).

### Other ReliaTel Benefits

The ReliaTel built-in anti-shortcycle timer, time delay relay and minimum "on" time control functions are factory tested to assure proper operation.

ReliaTel softens electrical "spikes" by staging on fans, compressors and heaters.

Intelligent Fallback is a benefit to the building occupant. If a component goes astray, the unit will continue to operate at predetermined temperature setpoint.

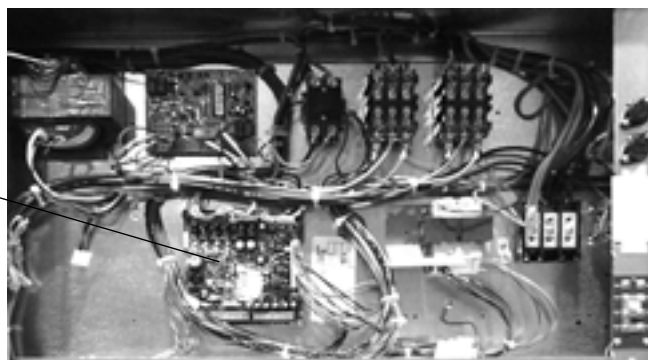
Intelligent Anticipation is a standard ReliaTel feature. It functions continuously as ReliaTel and zone sensor(s) work together in harmony to provide much tighter comfort control than conventional electro-mechanical thermostats.

The same ReliaTel Board fits all Precedent Packaged Gas/Electrics, Cooling with Electric Heat, and Heat Pump models. This provides standardization of parts for contractors. Less money is tied up in inventory with ReliaTel.

### Electromechanical Controls

For the simpler job that does not require a building automation system, or expanded diagnostics capabilities, Precedent offers electromechanical controls. This 24-volt control includes the control transformer and contactor pressure lugs for power wiring.

ReliaTel™





## Features and Benefits

### Outstanding Standard and Optional Components

#### Black Epoxy Pre-Coated Coils

The pre-coated coils are an economical option for protection in mildly corrosive environments.

#### Cabinet Integrity

For added water integrity, Precedent has a raised  $1\frac{1}{8}$ " lip around the supply and return of the downflow units to prevent water from blowing into the ductwork.

#### Clogged Filter/Fan Failure Switch

A dedicated differential pressure switch is available to achieve active fan failure indication and/or clogged filter indication.

These sensors allow a zone sensor service light or Integrated Comfort System to indicate a dirty filter or a fan that's not working. The field installation charges for these valuable feedback devices often eliminate them from consideration. Factory installation can make such features a good investment.

#### CO<sub>2</sub> Sensing

The CO<sub>2</sub> sensor has the ability to monitor space occupancy levels within the building by measuring the parts per million of CO<sub>2</sub> (Carbon Dioxide) in the air. As the CO<sub>2</sub> levels increase, the outside air damper modulates to meet the CO<sub>2</sub> space ventilation requirements. The CO<sub>2</sub> sensor kit is available as a field installed accessory.

#### Colored And Numbered Wiring

Save time and money tracing wires and diagnosing the unit.

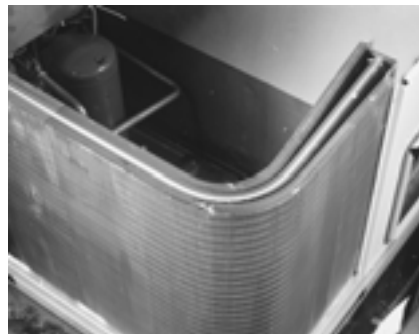
#### Compressors

Precedent contains the best compressor technology available to achieve the highest possible performance. Our compressor line includes Trane built ClimaTuff® reciprocating and scrolls.



#### Condenser Coil

Precedent boasts a patent-pending 1+1+1 condenser coil, permanently gapped for easy cleaning.



#### Dehumidification (Hot Gas Reheat) Option

This option allows for increased outdoor air ventilation. It reduces humidity levels while increasing comfort level in the air space. Cooling can operate without a demand for dehumidification. The hot gas reheat coil is designed to deliver maximum reheat temperatures and pivot to allow for easy access cleaning.



#### Digital Display Zone Sensor

The Digital LCD (Liquid Crystal Display) zone sensor has the look and functionality of standard zone sensors. This sensor should be utilized with ReliaTel™ controls.

#### Discharge Air Sensing Kit

Provides true discharge air sensing in heating models. The kit is functional only with the ReliaTel Options Module.

#### Downflow And Horizontal Economizers

The economizers come with three control options — dry bulb is standard, enthalpy and differential enthalpy are optional.

#### Dual Thermistor Remote Zone Sensor

This sensor will reduce the total number of remote sensors to obtain space temperature averaging. This sensor should be utilized with ReliaTel controls.

# Features and Benefits

## Foil-Faced Insulation

All panels in the evaporator section of the unit have cleanable foil-faced insulation. All edges are either captured or sealed to ensure no fibers get into the airstream.

## Factory Built Roof Curbs

Available for downflow units. Only two roof curbs for the entire Precedent line simplifies curb selection.

## Flexibility

Units are built to order in our standard "shortest in the industry" ship cycle time.

## Fresh Air

0 - 25% manual or 0 - 50% motorized outside air hoods are available.

## High Pressure Cutout

This factory-installed option is offered for units that do not have High Pressure Cutout as standard. All 3-phase units with scroll compressors include High Pressure cutout as standard.

## High Static Drive Accessory

Available on many models, this high static drive accessory extends the capability of the standard motor. Avoid expensive motors and operating costs by installing this optimized sheave accessory.

## Hinged Access Doors

These doors permit easy access to the filter, fan/heat, and compressor/control sections. They reduce the potential roof damage from screws or sharp access door corners.



## LonTalk® Communications Interface

The LonTalk communications interface allows the unit to communicate as a Tracer™ LCI-V device or directly with generic LonTalk Network Building Automation System Controls.

## Phase Monitor

Phase monitor shall provide 100% protection for motors and compressors against problems caused by phase loss, phase imbalance, and phase reversal. Phase monitor is equipped with an LED that provides an ON or FAULT indicator.

## Power Exhaust Option

This option is available on downflow units and provides exhaust of the return air, when using a downflow economizer, to maintain proper building pressurization. Great for relieving most building overpressurization problems.

## Progressive Tubular Heat Exchanger

The compact cabinet features a tubular heat exchanger in low, medium and high heat capacities.

The heat exchanger is fabricated using stainless steel burners and corrosion-resistant aluminized steel tubes as standard on all models. It has an induced draft blower to pull the gas mixture through the burner tubes. The heater has a direct spark ignition system which doubles as a safety device to prove the flame.

Gas electric Precedent models exceed all California seasonal efficiency requirements. They also perform better than required to meet the California NOx emission requirements.

## Quick-Access Panels

Remove two screws for access to the standardized internal components and wiring.

## Quick-Adjust Idler Arm

With the Quick-Adjust Idler Arm, the belt and sheaves can be quickly adjusted without moving the mounted fan motor. The result is a major savings in time and money.



## Reference or Comparative Enthalpy

Measures and communicates humidity while maximizing comfort control.

## Sloped Drain Pans

Every Precedent unit has a non-corrosive, removable, double-sloped drain pan that's easy to clean and reversible to allow installation of drain trap on either side of the unit.



## Standardized Components

Components are placed in the same location on all Precedent units. Familiarize yourself with one Precedent and you are familiar with every Precedent.

Due to standardized components throughout the Precedent line, contractors/owners can stock fewer parts.

## Supply and/or Return Air Smoke Detector

With this option installed, if smoke is detected, all unit operation will be shut down. Reset will be manual at the unit. Return Air Smoke Detectors require minimum allowable airflow when used with certain models.



## Thermal Expansion Valve

Available for a wider range of applications.

## Trane Communication Interface (TCI)

Available factory or field installed. This module when applied with the ReliaTel™ easily interfaces with Trane's Integrated Comfort™ System.



## Features and Benefits

### Tool-less Hail Guards

Tool-less, hail protection quality coil guards shall be either factory or field-installed for condenser coil protection. This option protects the condenser coil from vandalism and/or hail damage.



### Unit Cabinet

The compact cabinet with rounded corners takes up less room and is less costly to ship. The beveled and ribbed top is not only aesthetically pleasing, it is designed to prevent water from pooling.



### VariTrac

When Trane's changeover VAV System for light commercial applications is coupled with Precedent, it provides the latest in technological advances for comfort management systems and can allow thermostat control in every zone served by VariTrac.

### Ventilation Override Accessory

With the Ventilation Override Accessory installed, the unit can be set to transition to up to 3 different pre-programmed sequences for Smoke Purge, Pressurization, and Exhaust. The transition occurs when a binary input on the RTOM is closed (shorted). This would typically be a hard wired relay output from a smoke detector or fire control panel. The ventilation override kit is available as a field installed accessory.

### Zone Sensors

Available in programmable, automatic and manual styles. Precedent offers ultimate flexibility. Units are built to order in our standard "shortest in the industry" ship cycle time.

### Rigorous Testing

All of Precedent's designs were rigorously rain tested at the factory to ensure water integrity.

Actual shipping tests were performed to determine packaging requirements. Units were test shipped around the country to determine the best packaging. Factory shake and drop tests were used as part of the package design process to help assure that the unit arrives at the job site in top condition.

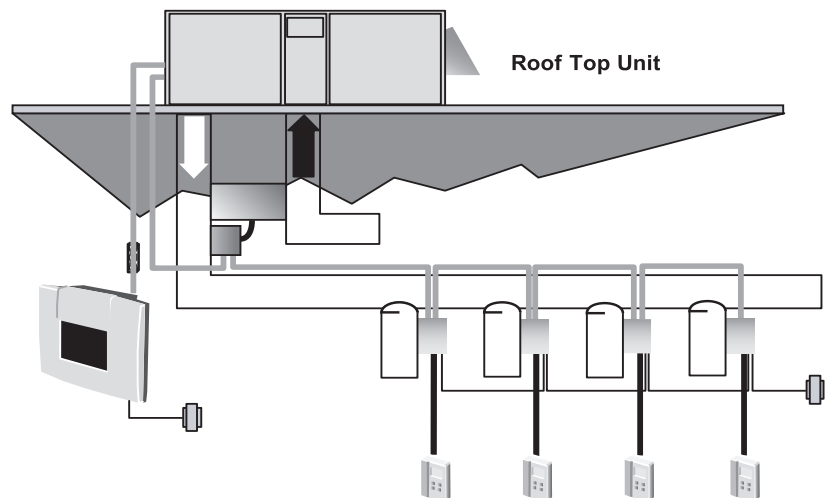
Rigging tests include lifting a unit into the air and letting it drop one foot, assuring that the lifting lugs and rails hold up under stress.

We perform a 100% coil leak test at the factory. The evaporator and condenser coils are leak tested at 200 psig and pressure tested to 450 psig.

All parts are inspected at the point of final assembly. Sub-standard parts are identified and rejected immediately.

Every unit receives a 100% unit run test before leaving the production line to make sure it lives up to rigorous Trane requirements.

VariTrac™



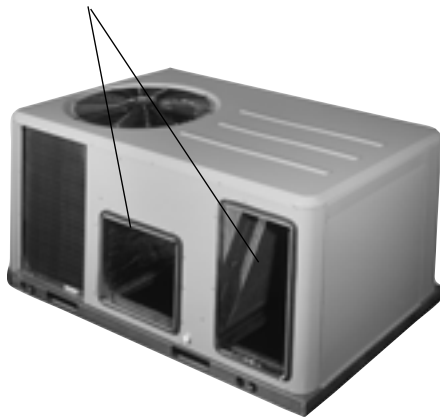


# Features and Benefits

## Easy to Install

### Convertible Units

- The units ship in a downflow configuration. They can be easily converted to horizontal by simply moving two panels.
- Units come complete with horizontal duct flanges so the contractor doesn't have to field fabricate them. These duct flanges are a time and cost saver.

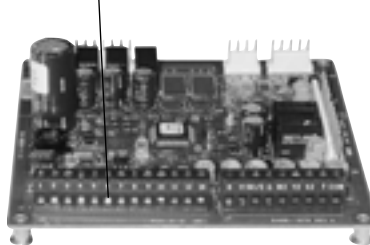


**Easy Access Low Voltage Terminal Board**  
Precedent's Low Voltage Terminal Board is external to the electrical control cabinet. It is extremely easy to locate and attach the thermostat wire and test operation of all unit functions. This is another cost and time saving installation feature.



### Low Voltage Connections

The wiring of the low voltage connections to the unit and the zone sensors is as simple as 1-1, 2-2, and 3-3. This simplified system makes it easy for the installer to wire.



### Electric Heaters

Electric heat modules are available within the basic unit. If ordering the Through the Base Electrical option with an Electrical Heater, the heater must be factory installed.

### Powered or Unpowered Convenience Outlet

This option is a GFCI, 120v/15amp, 2 plug, convenience outlet, either powered or unpowered. This option can only be ordered when the Through the Base Electrical with either the Disconnect Switch, or Circuit Breaker, option is ordered.



### Single Point Power

A single electrical connection powers the unit.

### Single Side Service

Single side service is standard on all units.

### Through the Base Condensate

Every unit includes provisions for through the base condensate drain connections. This allows the drain to be connected through the roof curb instead of a roof penetration.

### Through the Base Electrical Utility Access

Factory provided through the base openings simplify wiring and piping. Because these utility openings frequently minimize the number of roof penetrations, the integrity of roofing materials is enhanced.



### Through the Base Electrical with Circuit Breaker

This option is a factory installed thermal magnetic, molded case, HACR Circuit Breaker with provisions for through the base electrical connections.

# Features and Benefits

## Through the Base Electrical with Disconnect Switch

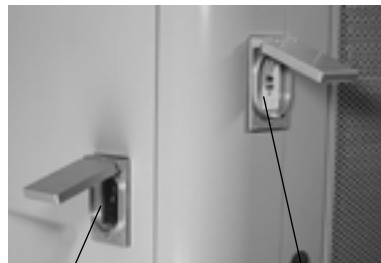
Factory installed 3-pole, molded case, disconnect switch with provisions for through the base electrical connections are available.

## Through the Base Utilities Access

An electrical service entrance shall be provided allowing electrical access for both control and main power connections inside the curb and through the base of the unit. Option will allow for field installation of liquid-tight conduit and an external field installed disconnect switch.

## Unit Mounted Disconnect or Circuit Breaker

Codes require a method of assured unit shutdown for servicing. Field-installed disconnects sometimes interfere with service access. Factory installation of unit disconnects reduces costs, assures proper mounting and provides the opportunity to upgrade to unit circuit breaker protection.



*Unit Mounted Disconnect  
or Circuit Breaker*

*Convenience Outlet*

## Factory Installed Options

A wide variety of Factory Installed Options (FIOPs) are available.

## Added Efficiency

### Airflow

Airflow is outstanding. The Precedent can replace an older machine with old ductwork and, in many cases, improve the comfort through better air distribution.

Belt or direct drive – standard or oversized supply fan motors meet a wide airflow range.

### Cooling

Standard or High Efficiency Cooling available.

### Economizer

Equipped with either dry bulb, reference or comparative enthalpy sensing, this feature provides free cooling as the outdoor temperature and/or humidity decreases. Economizers, correctly installed, offer a valuable energy savings. Factory-installed economizers save time and ensure proper installation.

### High Efficiency Motors

This option is available with efficiency ratings from 86.5 up to 91.0. It is not available for all models.

### Low Ambient Cooling

All Precedent microprocessor units have cooling capabilities down to 0°F as standard. Electromechanical models have cooling capabilities to 40°F as built, or to 0°F by adding the optional low ambient control (frostat).

### Oversized Motors

Factory or field installed oversized motors available for high static applications.

### One of our Finest Assets:

Trane Sales Representatives are a Support Group that can assist you with:

- Product
- Application
- Service
- Training
- Special Applications
- Specifications
- Computer Programs and much more

Precedent has the features and benefits that make it first class in the light commercial rooftop market.

# Application Considerations

---

Application of this product should be within the cataloged airflow and cooling considerations.

## **Low Ambient Cooling**

The Precedent™ line features, with ReliaTel™ microprocessor controls, low ambient cooling down to 0°F. With electromechanical controls, Precedent features low ambient cooling to 40°F. The following options need to be included/considered when low ambient applications are required: continuous fan operation, crankcase heaters, thermal expansion valves, froststat. Contact your local Trane Representative for more assistance with low ambient cooling applications.

## **Barometric Relief**

This product line offers an optional barometric relief damper for use in conjunction with economizer option. This accessory consists of gravity dampers which open with increased pressure. As the building air pressure increases, the pressure in the unit return air section also increases, opening the dampers and relieving the conditioned space.

NOTE: THE EFFECTIVENESS OF BAROMETRIC RELIEF DAMPER DURING ECONOMIZING OPERATION IS SYSTEM RELATED.

PRESSURE DROP OF THE RETURN AIR SYSTEM SHOULD BE CONSIDERED TO CONTROL BUILDING PRESSURIZATION.

## **Heating Operation**

The heat exchanger is manufactured with aluminized steel. To prevent condensation within the heat exchanger, do not exceed 50% outside air or a minimum mixed air temperature of 40°F.

## **Condensate Trap**

The evaporator is a draw-thru configuration. A trap must be field provided prior to start-up on the cooling cycle.

## **Clearance Requirements**

The recommended clearances identified with unit dimensions should be maintained to assure adequate service maximum capacity and peak operating efficiency. Actual clearances which appear inadequate should be reviewed with the local Trane sales personnel.

## **Unit Pitch**

These units have reversible sloped condensate drain pans. Units must be installed level, any unit slope must be toward the side of unit where condensate drain is connected.



# Selection Procedures

## Cooling Capacity

### Step 1

Calculate the building's total and sensible cooling loads at design conditions. Use the Trane calculation methods or any other standard accepted method.

Factors used in unit selection:

#### A

Total Cooling Load: 58 MBh

#### B

Sensible Cooling Load: 40 MBh

#### C

Airflow: 2000 cfm

#### D

Electrical Characteristics: 460/60/3

#### E

Summer Design Conditions: Entering Evaporator Coil: 80 DB, 67 WB Outdoor Ambient: 95

#### F

External Static Pressure: 0.52 in. wg

#### G

Downflow Configuration

#### H

High Efficiency

#### I

Economizer

### Step 2

As a starting point, a rough determination must be made of the size of the unit. The final selection will be made after examining the performance at the given conditions. Divide the total cooling load by nominal BTUH per ton (12 MBh per ton); then round up to the nearest unit size.

$58 \text{ MBh} / 12 \text{ MBh} = \text{approx. } 5 \text{ tons}$

### Step 3

Examine gross capacity: Table PD-13 shows that a YHC060A4 has a gross cooling capacity of 62.4 MBh and 48.4 MBh sensible capacity at 2000 cfm and 95 DB outdoor ambient with 80 DB, 67 WB air entering the evaporator.

### To Find Capacity at Intermediate Conditions Not in the Table

When the design conditions are between two numbers that are in the capacity table, interpolation is required to approximate the capacity. Note: Extrapolation outside of the table conditions is not recommended.

### Step 4

Verify the unit will have enough capacity to meet the building requirements by determining the net capacity, which includes heat generated by the fan. In order to select the correct unit which meets the building's requirements, the fan motor heat must be deducted from the gross cooling capacity. The amount of heat that the fan motor generates is dependent on the effort by the motor - cfm and static pressure. To determine the total unit static pressure add the external static pressure to the additional static created by the added features:

External Static (duct system)

0.52 wg

Standard Filter 1 in.  
from Table PD-89

0.06 wg

Economizer

0.18 wg

(100% Outside Air)

from Table  
PD-89

Total Static Pressure

0.76 wg

Note: The Evaporator Fan Performance Table PD-64 has deducted the pressure drop for a 1 in. filter already in the unit (see note below Table PD-64). Therefore, the actual total static pressure is  $0.76 - 0.06$  (from Table PD - 89) = 0.70 wg.

With 2000 cfm and 0.70 wg., Table PD-64 shows 1.07 bhp for this unit. Note below the table gives a formula to calculate Fan Motor Heat,

$$2.829 \times \text{bhp} + .4024 = \text{MBH.}$$

$$2.829 \times 1.07 + .4024 = 3.43 \text{ MBH.}$$

Now subtract the fan motor heat from the gross cooling capacity of the unit:

$$\begin{aligned} \text{Net Total Cooling Capacity} \\ = 62.4 \text{ MBH} - 3.43 = 58.97 \text{ MBH.} \end{aligned}$$

$$\begin{aligned} \text{Net Sensible Cooling Capacity} \\ = 48.4 \text{ MBH} - 3.43 = 44.97 \text{ MBH.} \end{aligned}$$

### Step 5

If the performance will not meet the required load of the building's total or sensible cooling load, try a selection at the next higher size unit.

## Heating Capacity

**Step 1** — Calculate the building heating load using the Trane calculation form or other standard accepted method.

**Step 2** — Size the system heating capacity to match the calculated building heating load. The following are building heating requirements:

- Total heating load of 60.0 MBh
- 2000 cfm
- Fuel - Natural gas

For the YSC060A4 there are three heating capacities available, 60 MBh, 80 MBh and 130 MBh input models shown in Table PD-91. The output capacities of these furnaces are 48 MBh, 64 MBh and 104 MBh respectively. The medium heat model with 64 MBh best matches the building requirements, indicating a YHC060A4\*M should be selected.

### Air Delivery Selection

External static pressure drop through the air distribution system has been calculated to be 0.7 inches of water. Enter Table PD-64 for a YHC060A4\*M at 2000 cfm and 0.70 static pressure. The standard belt drive motor will give the desired airflow with 1.07 bhp and 1094 rpm.

### Accessory Selection

Select accessories needed to accommodate the application.

# Selection Procedure

## Dehumidification Selection

Typical 10 ton YHC120A  
 3200 cfm Total Supply airflow  
 1280 cfm Outside Air (40%)  
 1920 cfm Return Air  
 0.35" External Static Pressure

### OA Conditions

*Part load day and raining*  
 68°F db  
 67°F wb

### RA' conditions

75°F db  
 63°F wb

### Step 1: Determine the mixed/entering air condition (MA')

MA' = (% outside air\*outside air dry-bulb temperature) + (% return air\*return air dry-bulb temperature)

$$MA' = (0.40*68°F) + (0.60*75°F)$$

MA' = 72.20°F db

**Note: Repeat for wet-bulb temperature (wb).**

Plot on psychrometric chart.

### MA'

72.2°F db  
 65°F wb

### Step 2: Determine the additional static pressure drop for a reheat unit

Table PD-89 shows a static pressure drop of 0.15" for the reheat coil and an additional .03 for the mandatory 2" pleated filters required when ordering the dehumidification option. Total static pressure =

$$1.0 + 0.015 + 0.03 = 1.045$$

(≈1.8 for manual calculations)

Do not forget to also add any additional static from other accessories.

Table PD-82 (airflow table for 10 ton downflow unit) indicates that a standard motor and drive is needed for this airflow and static pressure range.

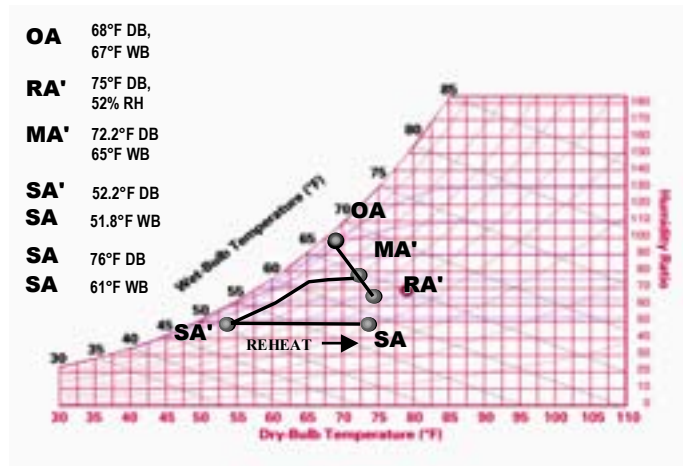


Chart C-1

### Step 3a: Determine leaving evaporator temperature (SA')

Leaving Unit Temperature = SA'  
 Utilizing the manual selection method as previously described and the formula

$$\Delta \text{Temp} = \frac{\text{gross sensible or latent cooling capacity in Bth}}{(\text{cfm})(1.085)}$$

Subtract your sensible  $\Delta$  temp from the entering db and latent  $\Delta$  temp from the entering wb or use the TOPSS™ program determine the leaving evaporator temperature (temperature without the addition of fan heat).

52.25 db  
 57.84 wb

### Step 3b: Determine leaving unit temperature in standard cooling mode

Repeat Step 3a substituting net sensible or latent capacity for gross sensible or latent capacity to find the leaving unit temperature including fan heat or refer to your TOPSS selection.

54.75 db  
 53.11 wb

### Step 4: Determine reheat temperature rise

Using the leaving evaporator temp (SA'), go to PD-92 and determine the reheat temperature rise for that particular cfm: ≈21.3°F db

*Note: Reheat temperature rise is based on **supply airflow** and leaving **evaporator coil** temperature.*

### Step 5: Determine leaving unit sensible temperature with reheat active (SA)

Reheat temperature (obtained in step 4) + (SA' + fan heat) = SA

(SA' + fan heat) = leaving unit temperature in standard cooling mode from step 3b.

$$21.3°F \text{ db} + 54.75°F = 76°F \text{ db}$$

SA=76°F

Since reheat adds only sensible heat, follow the psychrometric chart to find the new wb temperature.

$$\approx 61°F \text{ wb}$$

Consider Chart C-1. If the space relative humidity is equal to or above the space relative humidity setpoint, the Dehumidification option will:

- Energize compressor or both compressors (2 stage compressor units).
- Hot gas reheat valve is energized and hot gas is diverted to the reheat coil.
- Dehumidification/reheat is terminated when space humidity is reduced to 5% below relative humidity setpoint.

At MA', air enters the RTU. The RTU filters, cools, and dehumidifies the air as it moves through the evaporator coil. Air leaves the evaporator coil saturated at the preset dew point condition (SA') and is reheated by the hot gas reheat coil to deliver 76°F (SA) supply air to the space.



# Model Number Description

**Y S C 036 A 3 R L A \*\* C 0 0 0 C 1 0 0 0 1 A 1**  
**1 2 3 4,5,6 7 8 9 10 11 12,13 14 15 16 17 18 19 20 21 22 23 24 25**

## **DIGIT 1 - Unit Function**

Y = DX Cooling, Gas Heat

## **DIGIT 2 - Efficiency**

S = Standard Efficiency  
H = High Efficiency

## **DIGIT 3 - Airflow**

C = Convertible

## **DIGITS 4,5,6 - Nominal Gross Cooling**

### **Capacity (MBh)**

036 = 3 Ton  
048 = 4 Ton  
060 = 5 Ton  
072 = 6 Ton  
090 = 7½ Ton, Single Compressor  
092 = 7½ Ton, Dual Compressors  
102 = 8½ Ton  
120 = 10 Ton

## **DIGIT 7 - Major Design Sequence**

A = First

## **DIGIT 8 - Unit Voltage**

1 = 208-230/60/1  
3 = 208-230/60/3  
4 = 460/60/3  
W = 575/60/3  
K = 380/60/3

## **DIGIT 9 - Unit Controls**

E = Electromechanical  
R = ReliaTel™ Microprocessor

## **DIGIT 10 - Heating Capacity**

L = Low  
M = Medium  
H = High

## **DIGIT 11 - Minor Design Sequence**

A = First Sequence

## **DIGITS 12, 13 - Service Sequence**

\*\* = Factory Assigned

## **DIGIT 14 - Fresh Air Selection**

0 = No Fresh Air  
A = Manual Outside Air Damper 0-50%  
B = Motorized Outside Air Damper 0-50%  
C = Economizer, Dry Bulb 0-100% without Barometric Relief  
D = Economizer, Dry Bulb 0-100% with Barometric Relief  
E = Economizer, Reference Enthalpy 0-100% without Barometric Relief  
F = Economizer, Reference Enthalpy 0-100% with Barometric Relief  
G = Economizer, Comparative Enthalpy 0-100% without Barometric Relief  
H = Economizer, Comparative Enthalpy 0-100% with Barometric Relief

## **DIGIT 15 - Supply Fan/Drive Type/Motor**

0 = Standard Drive  
1 = Oversized Motor  
2 = Optional Belt Drive Motor

## **DIGIT 16 - Hinged Service Access Filters**

0 = Standard Panels/Standard Filters  
A = Hinged Access Panels/Standard Filters  
B = Standard Panels/2" Pleated Filters  
C = Hinged Access Panels/2" Pleated Filters

## **DIGIT 17 - Condenser Coil Protection**

0 = Standard Coil  
1 = Standard Coil with Hail Guard  
2 = Black Epoxy Pre-Coated Condenser Coil  
3 = Black Epoxy Pre-Coated Condenser Coil with Hail Guard

## **DIGIT 18 - Through the Base Provisions**

0 = No Through the Base Provisions  
A = Through the Base Electric  
B = Through the Base Gas Piping  
C = Through the Base Electric and Gas Piping

## **DIGIT 19 - Disconnect/Circuit Breaker/Phase Monitor (3 phase only)**

0 = No Disconnect/No Circuit Breaker/No Phase Monitor  
1 = Unit Mounted Non-Fused Disconnect  
2 = Unit Mounted Circuit Breaker  
3 = Phase Monitor  
4 = Phase Monitor & Non-Fused Disconnect Switch  
5 = Phase Monitor & Circuit Breaker

## **DIGIT 20 - Convenience Outlet**

0 = No Convenience Outlet  
A = Unpowered Convenience Outlet  
B = Powered Convenience Outlet (3 phase only)

## **DIGIT 21 - Communications Options**

0 = No Communications Interface  
1 = Trane Communications Interface  
2 = LonTalk® Communications Interface  
3 = Novar 2024 Controls  
4 = Novar 3051 Controls

## **DIGIT 22 - Refrigeration System Option**

0 = Standard Refrigeration System  
A = Thermal Expansion Valve (TXV)  
B = Dehumidification (Hot Gas Reheat Coil)

## **DIGIT 23 - Refrigeration Controls**

0 = No Refrigeration Control  
1 = High Pressure Control  
2 = Froststat  
3 = Crankcase Heater  
4 = High Pressure Control and Froststat  
5 = High Pressure Control and Crankcase Heater  
6 = Froststat and Crankcase Heater  
7 = High Pressure Control, Froststat and Crankcase Heater

## **DIGIT 24 - Smoke Detector**

0 = No Smoke Detector  
A = Return Air Smoke Detector  
B = Supply Air Smoke Detector  
C = Supply and Return Air Smoke Detectors

## **DIGIT 25 - Monitoring Controls**

0 = No Monitoring Control  
1 = Clogged Filter Switch  
2 = Fan Failure Switch  
3 = Discharge Air Sensing Tube  
4 = Clogged Filter Switch and Fan Fail Switch  
5 = Clogged Filter Switch and Discharge Air Sensing Tube  
6 = Fan Fail Switch and Discharge Air Sensing Tube  
7 = Clogged Filter and Fan Fail Switches and Discharge Air Sensing Tube  
8 = Novar Return Air Sensor

### **Example:**

Model number YSC036A3RLA\*\*C000C10001A10 describes a unit with the following characteristics: DX Cooling with natural gas heating, 3 ton nominal cooling capacity, 208-230/60/3 power supply, ReliaTel™ controls, low heat model. 0-100% dry bulb economizer without barometric relief, standard direct drive motor, standard access panels, standard condenser coil with no coil protection, through the base electric and gas access, non-fused disconnect, no convenience outlet or communications interface, standard refrigeration coil, high pressure control, return air smoke detector, and clogged filter switch.



# General Data

## (3 - 4 Tons) Standard Efficiency

Table GD-1 — General Data

	3 Ton Convertible Units						4 Ton Convertible Units					
	YSC036A1			YSC036A3, A4, AW			YSC048A1			YSC048A3, A4, AW		
<b>Cooling Performance<sup>1</sup></b>												
Gross Cooling Capacity	37,400			37,400			50,300			49,200		
SEER <sup>2</sup>	10.5			10.7			10.1			10.0		
Nominal CFM / ARI Rated CFM	1,200/1,200			1,200/1,200			1,600/1,600			1,600/1,600		
ARI Net Cooling Capacity	36,000			36,000			48,000			47,000		
System Power (KW)	3.91			3.79			5.28			5.40		
<b>Heating Performance<sup>4</sup></b>												
Heating Models	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Heating Input (Btu)	60,000	80,000	120,000	60,000	80,000	120,000	60,000	80,000	120,000	60,000	80,000	120,000
Heating Output (Btu)	47,000	63,000	95,000	48,000	64,000	96,000	47,000	63,000	95,000	48,000	64,000	96,000
AFUE % <sup>5</sup>	80	80	80	81	81	81	80	80	80	81	81	81
Steady State Efficiency (%)	80	80	80	81	81	81	80	80	80	81	81	81
No. Burners	2	2	3	2	2	3	2	2	3	2	2	3
No. Stages	1	1	1	1	1	1	1	1	1	1	1	1
Gas Supply Line Pressure												
Natural (minimum/maximum)	4.5/14.0			4.5/14.0			4.5/14.0			4.5/14.0		
LP (minimum/maximum)	10.0/14.0			10.0/14.0			10.0/14.0			10.0/14.0		
Gas Connection Pipe Size (in.)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
<b>Compressor</b>												
No./Type	1/Hermetic			1/Hermetic			1/Scroll			1/Scroll		
<b>Outdoor Sound Rating (dB)<sup>6</sup></b>	83			83			86			82		
<b>Outdoor Coil -Type</b>	Lanced			Lanced			Lanced			Lanced		
Tube Size (in.) OD	0.3125			0.3125			0.3125			0.3125		
Face Area (sq ft)	7.19			7.19			6.17			9.59		
Rows/FPI	2/17			2/17			2/17			1/17		
<b>Indoor Coil -Type</b>	Lanced			Lanced			Lanced			Lanced		
Tube Size (in.)	0.3125			0.3125			0.3125			.3125		
Face Area (sq ft)	5.67			5.67			6.68			6.17		
Rows/FPI	2/16			2/16			3/16			3/16		
Refrigerant Control	Short Orifice			Short Orifice			Short Orifice			Short Orifice		
Drain Connection No./Size (in.)	1¾ NPT			1¾ NPT			1¾ NPT			1¾ NPT		
<b>Outdoor Fan -Type</b>	Propeller			Propeller			Propeller			Propeller		
No. Used/Diameter (in.)	1/22			1/22			1/22			1/22		
Drive Type/No. Speeds	Direct/1			Direct/1			Direct/1			Direct/1		
CFM	2,550			2,550			2,850			3,610		
No. Motors/HP	1/0.20			1/0.20			1/0.33			1/0.33		
Motor RPM	1,075			1,075			1,075			1,075		
<b>Direct Drive Indoor Fan -Type</b>	FC Centrifugal			FC Centrifugal			FC Centrifugal			FC Centrifugal		
No. Used/Diameter (in.)	1/10 x 10			1/10 x 10			1/11 x 11			1/11 x 11		
Drive Type/No. Speeds	Direct/2			Direct/2			Direct/2			Direct/2		
No. Motors	1			1			1			1		
Motor HP (Standard/Oversized)	0.33/0.50			0.33/0.50			0.60/0.80			0.60/0.80		
Motor RPM (Standard/Oversized)	950/1,100 <sup>9</sup>			930/1,100 <sup>9</sup>			1,000/1,100			1,000/1,100		
Motor Frame Size (Standard/Oversized)	48/48			48/48			48/48			48/48		



# General Data

## (3 - 4 Tons) Standard Efficiency

Table GD-1 — Continued

	3Ton Convertible Units		4Ton Convertible Units	
	YSC036A1	YSC036A3, A4, AW	YSC048A1	YSC048A3, A4, AW
<b>Belt Drive Indoor Fan</b> -Type	—	FC Centrifugal	—	—
No. Used/Diameter (in.)	—	1/11 x 11	—	1/11 x 11
Drive Type/No. Speeds	—	Belt/Variable Sheave	—	—
No. Motors	—	1	—	1
Motor HP (Standard/Oversized)	—	1.00/—	—	1.00/—
Motor RPM (Standard/Oversized)	—	1,750/—	—	1,750/—
Motor Frame Size (Standard/Oversized)	—	56/—	—	56/—
<b>Filters</b> -Type Furnished <sup>10</sup>	Throwaway	Throwaway	Throwaway	Throwaway
(No.) Size Recommended	(2) 20 x 25 x 1 <sup>8</sup>	(2) 20 x 25 x 1 <sup>8</sup>	(2) 20 x 25 x 1 <sup>8</sup>	(2) 20 x 25 x 1 <sup>8</sup>
<b>Refrigerant Charge</b> (Lbs of R-22) <sup>7</sup>	3.8	3.8	4.4	3.8

Notes:

1. Cooling Performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).
2. EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
3. Integrated Part Load Value is rated in accordance with ARI Standard 210/240 or 360. Units are rated at 80° F ambient, 80° F entering dry bulb, and 67° F entering wet bulb at ARI rated cfm.
4. Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.
5. AFUE is rated in accordance with DOE test procedures.
6. Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to Table PD-90.
7. Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
8. 20 x 25 filter on medium and low heat models. 20 x 30 filter on high heat models
9. Motor RPM shown is low speed. High speed RPM is 1,060/1,145.
10. Optional 2" pleated filters also available.





# General Data

## (5 - 6 Tons) Standard Efficiency

Table GD-2 — General Data

	5Ton Convertible			6Ton Convertible		
	YSC060A1			YSC060A3, A4, AW, AK		
<b>Cooling Performance<sup>1</sup></b>						
Gross Cooling Capacity	63,100			72,000		
SEER/EER <sup>2</sup>	9.90/—			—/10.2 <sup>12</sup>		
Nominal CFM / ARI Rated CFM	2,000/2,000			2,400/2,100		
ARI Net Cooling Capacity	60,000			69,000		
Integrated Part Load Value <sup>3</sup>	—			—		
System Power (KW)	6.86			6.77		
<b>Heating Performance<sup>4</sup></b>						
Heating Models	Low	Medium	High	Low	Medium <sup>13</sup>	High
Heating Input (Btu)	60,000	80,000	130,000	60,000	80,000	130,000
Heating Output (Btu)	47,000	63,000	103,000	48,000	64,000	104,000
AFUE% <sup>5</sup>	81	81	80	81	81	80
Steady State Efficiency (%)	81	81	80	81	81	80
No. Burners	2	2	3	2	2	3
No. Stages	1	1	1	1	1	1
Gas Supply Line Pressure						
Natural (minimum/maximum)	4.5/14.0			4.5/14.0		
LP (minimum/maximum)	10.0/14.0			10.0/14.0		
Gas Connection Pipe Size (in.)	1/2	1/2	1/2	1/2	1/2	3/4
<b>Compressor</b>						
No./Type	1/Scroll			1/Scroll		
<b>Outdoor Sound Rating (dB)<sup>6</sup></b>	84			84		
<b>Outdoor Coil - Type</b>	Lanced			Lanced		
Tube Size (in.) OD	0.3125			0.3125		
Face Area (sq ft)	8.81			8.81		
Rows/FPI	2/17			2/17		
<b>Indoor Coil - Type</b>	Lanced			Lanced		
Tube Size (in.)	0.3125			0.3125		
Face Area (sq ft)	5.00			5.00		
Rows/FPI	3/16			3/16		
Refrigerant Control	Short Orifice			Short Orifice		
Drain Connection No./Size (in.)	1/3/4 NPT			1/3/4 NPT		
<b>Outdoor Fan - Type</b>	Propeller			Propeller		
No. Used/Diameter (in.)	1/22			1/22		
Drive Type/No. Speeds	Direct/1			Direct/1		
CFM	3,470			3,470		
No. Motors/HP	1/0.33			1/0.33 <sup>15</sup>		
Motor RPM	1075			1,075		
<b>Direct Drive Indoor Fan - Type</b>	FC Centrifugal			FC Centrifugal		
No. Used/Diameter (in.)	1/11 x 11 <sup>8</sup>			1/11 x 11 <sup>8</sup>		
Drive Type/No. Speeds	Direct/2			Direct/2		
No. Motors	1			1		
Motor HP (Standard/Oversized)	0.90/1.00			0.90/1.00 <sup>16</sup>		
Motor RPM (Standard/Oversized)	985/1,080 <sup>9</sup>			985/1,080 <sup>9</sup>		
Motor Frame Size (Standard/Oversized)	48/48			48/48		



# General Data

## (5 - 6 Tons) Standard Efficiency

Table GD-2 — Continued

	5Ton Convertible		6Ton Convertible
	YSC060A1	YSC060A3, A4, AW, AK	YSC072A3, A4, AW, AK
<b>Belt Drive Indoor Fan</b> -Type	—	FC Centrifugal	FC Centrifugal
No. Used/Diameter (in.)	—	1/11 x 11	1/12 x 12
Drive Type/No. Speeds	—	Belt/Variable Sheave	Belt/Variable Sheave
No. Motors	—	1	1
Motor HP (Standard/Oversized)	—	1.00/—	1.00/2.00 <sup>17</sup>
Motor RPM (Standard/Oversized)	—	1,750/ —	1,750/1,750
Motor Frame Size (Standard/Oversized)	—	48/—	56/56
<b>Filters</b> -Type Furnished <sup>11</sup>	Throwaway	Throwaway	Throwaway
(No.) Size Recommended	(2) 20 x 25 x 1 <sup>10</sup>	(2) 20 x 25 x 1 <sup>10</sup>	(4) 16 x 25 x 2
<b>Refrigerant Charge</b> (Lbs of R-22) <sup>7</sup>	4.7	4.9	7.1

Notes:

1. Cooling Performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz) units.
2. EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
3. Integrated Part Load Value is rated in accordance with ARI Standard 210/240 or 360. Units are rated at 80° F ambient, 80° F entering dry bulb, and 67° F entering wet bulb at ARI rated cfm.
4. Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.
5. AFUE is rated in accordance with DOE test procedures.
6. Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to Table PD-90.
7. Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
8. YSC060A1, 3, 4, W Oversized Motor and YSC060AK Standard Motor Fan Diameter is 12 x 11.
9. Motor RPM shown is low speed. High speed RPM is 1100/1135.
10. Filter size shown is for low and medium heat models. High heat model filter size recommended is 20 x 30 x 1.
11. Optional 2" pleated filters also available.
12. YSC072A when used in a horizontal application has an EER of 10.1 and System Power (kW) of 6.83.
13. Medium heat is not available for AK (380V/60 Hz) units.
14. Outdoor motor is 0.75 hp for AK (380V/60 Hz) units.
15. Outdoor motor is 0.40 hp for AK (380V/60 Hz) units.
16. Standard Motor is 1.00 hp for YSC060AK (380V/60 Hz) units.
17. Standard Motor is 2.00 hp for the YSC072AK (380V/60 Hz) units.



# General Data

(7½ - 8½ Tons)  
Standard Efficiency

Table GD-3 — General Data

	7½Ton Convertible						8½Ton Convertible		
	Single Compressor YSC090A3, A4, AW, AK			Dual Compressor YSC092A3, A4, AW			YSC102A3,A4,AW, AK		
<b>Cooling Performance<sup>1</sup></b>									
Gross Cooling Capacity	95,000			92,000			105,000		
EER <sup>2</sup>	10.1			10.4 <sup>8</sup>			10.1		
Nominal CFM / ARI Rated CFM	3,000/2,625			3,000/2,625			3,400/3,000		
ARI Net Cooling Capacity	90,000			87,000			100,000 <sup>9</sup>		
Integrated Part Load Value <sup>3</sup>	—			11.0 <sup>8</sup>			11.8 <sup>9</sup>		
System Power (KW)	8.91			8.37 <sup>8</sup>			9.9 <sup>9</sup>		
<b>Heating Performance<sup>4</sup></b>									
Heating Models	Low	Medium <sup>11</sup>	High	Low	Medium	High	Low	Medium <sup>11</sup>	High
Heating Input (Btu)	120,000	150,000	200,000	120,000	150,000	200,000	120,000	150,000	200,000
Heating Output (Btu)	97,200	121,500	162000	97,200	121,500	162000	97,200	121,500	162000
AFUE% <sup>5</sup>	81	81	81	81	81	81	81	81	81
Steady State Efficiency (%)	81	81	80	81	81	80	81	81	81
No. Burners	3	3	4	3	3	4	3	3	4
No. Stages	1	2	2	1	2	2	1	2	2
Gas Supply Line Pressure									
Natural (minimum/maximum)		4.5/14.0			4.5/14.0			4.5/14.0	
LP (minimum/maximum)		10.0/14.0			10.0/14.0			10.0/14.0	
Gas Connection Pipe Size (in.)	1/2	3/4	3/4	1/2	3/4	3/4	1/2	3/4	3/4
<b>Compressor</b>									
No./Type	1/Scroll			2/Scrolls			2/Scrolls		
<b>Outdoor Sound Rating (dB)<sup>6</sup></b>	90			87			86		
<b>Outdoor Coil</b> -Type	Lanced			Lanced			Lanced		
Tube Size (in.) OD	0.3125			0.3125			0.3125		
Face Area (sq ft)	170			170			19.83		
Rows/FPI	3/17			2/17			2/17		
<b>Indoor Coil</b> -Type	Lanced			Lanced			Lanced		
Tube Size (in.)	0.3125			0.3125			0.3125		
Face Area (sq ft)	9.89			9.89			12.36		
Rows/FPI	3/16			3/16			3/16		
Refrigerant Control	Short Orifice			Short Orifice			Short Orifice		
Drain Connection No./Size (in.)	1¾ NPT			1¾ NPT			1¾ NPT		
<b>Outdoor Fan</b> -Type	Propeller			Propeller			Propeller		
No. Used/Diameter (in.)	1/26			1/26			1/26		
DriveType/No. Speeds	Direct/1			Direct/1			Direct/1		
CFM	6200			6500			7100		
No. Motors/HP	1/0.70 <sup>12</sup>			1/0.70			1/0.75		
Motor RPM	1075			1,075			1,075		



# General Data

(7½ - 8½ Tons)  
Standard Efficiency

Table GD-3 — Continued

	7½ Ton Convertible		8½ Ton Convertible
	Single Compressor YSC090A3, A4, AW, AK	Dual Compressor YSC092A3, A4, AW	YSC102A3,A4,AW, AK
<b>Belt Drive Indoor Fan</b> -Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter (in.)	1/12 x 12	1/12 x 12	1/15 x 15
Drive Type/No. Speeds	Belt/Variable Sheave	Belt/Variable Sheave	Belt/Variable Sheave
No. Motors	1	1	1
Motor HP (Standard/Oversized)	2.00/3.00	2.00/3.00	2.00/3.00
Motor RPM (Standard/Oversized)	1,750/1,750	1,750/1,750	1,750/1,750
Motor Frame Size (Standard/Oversized)	56/56	56/56	56/56
<b>Filters</b> -Type Furnished <sup>10</sup>	Throwaway	Throwaway	Throwaway
(No.) Size Recommended	(4) 16 x 25 x 2	(4) 16 x 25 x 2	(4) 20 x 25 x 2
<b>Refrigerant Charge</b> (Lbs of R-22) <sup>7</sup>	11.9	6.2 Circuit 1/3.4 Circuit 2	7.9 Circuit 1/4.0 Circuit 2

- Notes:
- Cooling Performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz) units.
  - EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
  - Integrated Part Load Value is rated in accordance with ARI Standard 210/240 or 360. Units are rated at 80° F ambient, 80° F entering dry bulb, and 67° F entering wet bulb at ARI rated cfm.
  - Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.
  - AFUE is rated in accordance with DOE test procedures.
  - Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to Table PD-90.
  - Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
  - YSC092A when applied in a horizontal configuration has a 10.1 EER, 10.7 Integrated Part Load Value, and 8.61 System Power (KW).
  - YSC102A when applied in horizontal configuration has an 11.3 Integrated Part Load Value, 9.8 System Power (KW) and 99,000 ARI Net Cooling Capacity.
  - Optional 2" pleated filters also available.
  - Medium heat is not available for AK (380V/60 Hz) units.
  - Outdoor motor is 0.75 hp for AK (380V/60 Hz) units.



# General Data

(10 Tons)  
Standard Efficiency

**Table GD-4 — General Data**

10Ton Convertible YSC120A3, A4, AW, AK				
<b>Cooling Performance<sup>1</sup></b>				
Gross Cooling Capacity		118,000		
EER <sup>2</sup>		10.2 <sup>3</sup>		
Nominal CFM / ARI Rated CFM		4,000/3,200		
ARI Net Cooling Capacity		114,000 <sup>3</sup>		
Integrated Part Load Value <sup>3</sup>		11.3 <sup>3</sup>		
System Power (KW)		11.18 <sup>3</sup>		
<b>Heating Performance<sup>4</sup></b>				
Heating Models	Low	Medium <sup>10</sup>	High	
Heating Input (Btu)	150,000	200,000	250,000	
Heating Output (Btu)	121,500	162,000	202,500	
AFUE <sup>5</sup>	81	81	81	
Steady State Efficiency (%)	81	81	81	
No. Burners	3	4	5	
No. Stages	2	2	2	
Gas Supply Line Pressure				
Natural (minimum/maximum)		4.5/14.0		
LP (minimum/maximum)		10.0/14.0		
Gas Connection Pipe Size (in.)	3/4	3/4	3/4	
<b>Compressor</b>				
No./Type		2/Scrolls		
<b>Outdoor Sound Rating (dB)<sup>6</sup></b>				
		86		
<b>Outdoor Coil - Type</b>				
		Lanced		
Tube Size (in.) OD		0.3125		
Face Area (sq ft)		19.83		
Rows/FPI		2/17		
<b>Indoor Coil - Type</b>				
		Lanced		
Tube Size (in.)		0.3125		
Face Area (sq ft)		12.36		
Rows/FPI		4/16		
Refrigerant Control		Short Orifice		
Drain Connection No./Size (in.)		1 <sup>3</sup> / <sub>4</sub> NPT		



# General Data

(10 Tons)  
Standard Efficiency

Table GD-4 — Continued

	10Ton Convertible YSC120A3, A4, AW, AK
<b>Outdoor Fan</b> -Type	Propeller
No. Used/Diameter (in.)	1/26
Drive Type/No. Speeds	Direct/1
CFM	7000
No. Motors/HP	1/0.75
Motor RPM	1,075
<b>Belt Drive Indoor Fan</b> -Type	FC Centrifugal
No. Used/Diameter (in.)	1/15 x 15
Drive Type/No. Speeds	Belt/Variable Sheave
No. Motors	1
Motor HP (Standard/Oversized)	3.00/5.00
Motor RPM (Standard/Oversized)	1,750/3,450
Motor Frame Size (Standard/Oversized)	56/56
<b>Filters</b> -Type Furnished <sup>9</sup>	Throwaway
(No.) Size Recommended	(4) 20 x 25 x 2
<b>Refrigerant Charge</b> (Lbs of R-22) <sup>7</sup>	7.2 Circuit 1/5.3 Circuit 2

Notes:

1. Cooling Performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).
2. EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
3. Integrated Part Load Value is rated in accordance with ARI Standard 210/240 or 360. Units are rated at 80° F ambient, 80° F entering dry bulb, and 67° F entering wet bulb at ARI rated cfm.
4. Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.
5. AFUE is rated in accordance with DOE test procedures.
6. Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to Table PD-90.
7. Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
8. YSC120A when applied in a horizontal configuration has a 10.1 EER, 112,000 ARI Net Cooling Capacity, 10.7 Integrated Part Load Value and 11.09 System Power (KW).
9. Optional 2" pleated filters also available.
10. Medium heat is not available for AK (380V/60 Hz) units.



# General Data

(3 - 4 Tons)  
High Efficiency

Table GD-5 — General Data

	3Ton Convertible Units YHC036A1, A3, A4, AW			4Ton Convertible Units YHC048A1, A3, A4, AW		
<b>Cooling Performance<sup>1</sup></b>						
Gross Cooling Capacity	38,000			49,800		
SEER <sup>2</sup>	12.50			12.0		
Nominal CFM / ARI Rated CFM	1,200 / 1,200			1,600/1,600		
ARI Net Cooling Capacity	36,600			47,500		
System Power (KW)	3.33			4.48		
<b>Heating Performance<sup>3</sup></b>						
Heating Models	Low	Medium	High	Low	Medium	High
Heating Input (Btu)	60,000	80,000	120,000	60,000	80,000	120,000
Heating Output (Btu) <sup>7</sup>	48,000	64,000	96,000	48,000	64,000	96,000
AFUE % <sup>4,8</sup>	81	81	81	81	81	81
Steady State Efficiency (%) <sup>9</sup>	81	81	81	81	81	81
No. Burners	2	2	3	2	2	3
No. Stages	1	1	1	1	1	1
Gas Supply Line Pressure						
Natural (minimum/maximum)		4.5/14.0			4.5/14.0	
LP (minimum/maximum)		10.0/14.0			10.0/14.0	
Gas Connection Pipe Size (in.)	1/2	1/2	1/2	1/2	1/2	1/2
<b>Compressor</b>						
No./Type	1/Scroll			1/Scroll		
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>						
	83			85		
<b>Outdoor Coil - Type</b>						
Tube Size (in.) OD	Lanced			Lanced		
Face Area (sq ft)	0.3125			0.3125		
Rows/FPI	7.19			9.59		
	2/17			3/17		
<b>Indoor Coil - Type</b>						
Tube Size (in.)	Lanced			Lanced		
Face Area (sq ft)	0.3125			0.3125		
Rows/FPI	6.68			6.68		
	3/16			4/16		
Refrigerant Control	3/16			4/16		
Drain Connection No./Size (in.)	Short Orifice			Short Orifice		
	1/¾ NPT			1/¾ NPT		
<b>Outdoor Fan - Type</b>						
No. Used/Diameter (in.)	Propeller			Propeller		
DriveType/No. Speeds	1/22			1/22		
CFM	Direct/1 <sup>14</sup>			Direct/1 <sup>14</sup>		
No. Motors/HP	2,550			3,050		
Motor RPM	1/0.20			1/0.33		
	1,075			1,075		



# General Data

## (3 - 4 Tons) High Efficiency

Table GD-5 — Continued

	3Ton Convertible Units YHC036A1, A3, A4, AW	4Ton Convertible Units YHC048A1, A3, A4, AW
<b>Direct Drive Indoor Fan</b> -Type	FC Centrifugal	FC Centrifugal
No. Used/Diameter (in.)	1/10 x10	1/11 x 11
Drive Type/No. Speeds	Direct/2	Direct/2
No. Motors	1	1
Motor HP (Standard/Oversized)	0.33/0.50	0.60/0.80
Motor RPM (Standard/Oversized)	950/1,100 <sup>9</sup>	930/1,000 <sup>9</sup>
Motor Frame Size (Standard/Oversized)	48/48	48/48
<b>Belt Drive Indoor Fan</b> -Type	FC Centrifugal	FC Centrifugal
No. Used/Diameter (in.)	1/11 x 11	1/11 x 11
Drive Type/No. Speeds	Belt/Variable Sheave <sup>12</sup>	Belt/Variable Sheave <sup>12</sup>
No. Motors	1	1
Motor HP (Standard/Oversized)	1.00/—	1.00/—
Motor RPM (Standard/Oversized)	1,750/—	1,750/—
Motor Frame Size (Standard/Oversized)	56/—	56/—
<b>Filters</b> -Type Furnished <sup>13</sup>	Throwaway	Throwaway
(No.) Size Recommended	(2) 20 x 25 x 1 <sup>10</sup>	(2) 20 x 25 x 1 <sup>10</sup>
<b>Optional Hot Gas Reheat Coil</b> -Type <sup>15</sup>	Lanced	Lanced
Tube Size (in.)OD	0.375	0.375
Face Area (sq. ft.)	2.22	2.22
Rows/FPI	1/16	1/16
<b>Refrigerant Charge</b> (Lbs of R-22) <sup>6</sup>		
Standard	5.3 <sup>11</sup>	7.7 <sup>11</sup>
Optional Hot Gas Reheat Coil	5.3	8.5

Notes:

- Cooling Performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal cfm. Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240.
- SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.
- AFUE and Steady State Efficiency is rated in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to Table PD-90.
- Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
- YHC036A1 and YHC048A1 Heating Output (Btu) is Low 47,000, Medium 63,000, High 95,000.
- YHC036A1 and YHC048A1 AFUE (%) and Steady State (%) is Low, Medium and High 80.0.
- Motor RPM shown is low speed. High speed Motor RPM is: YHC036A 1,060/1,145, YHC048A 1,000/1,100.
- Filter size shown is for low and medium heat models. High heat model filter size recommended is 20 x 30 x 1.
- Refrigerant charge shown is for three phase. YHC036A1 Refrigerant Charge is 4.5, YHC048A1 refrigerant charge is 8.1.
- Belt Drive motor is not available for YHC036A1, YHC048A1
- Optional 2" pleated filters also available.
- With Dehumidification (Hot Gas Reheat) option: Direct/2.
- Available on three-phase only.





# General Data

(5 - 6 Tons)  
High Efficiency

Table GD-6 — General Data

	5Ton Convertible Units						6Ton Convertible Units		
	YHC060A1			YHC060A3, A4, AW			YHC072A3, A4, AW		
<b>Cooling Performance<sup>1</sup></b>									
Gross Cooling Capacity	62,100			62,400			73,000		
SEER / EER <sup>2</sup>	11.8 / —			12.0/ —			— /11.5 <sup>10</sup>		
Nominal CFM / ARI Rated CFM	2,000 / 2,000			2,000/2,000			2,400/2,100		
ARI Net Cooling Capacity	59,000			59,500			70,000		
System Power (KW)	5.73			5.56			6.09 <sup>10</sup>		
<b>Heating Performance<sup>4</sup></b>									
Heating Models	Low	Medium	High	Low	Medium	High	Low	Medium	High
Heating Input (Btu)	60,000	80,000	130,000	60,000	80,000	130,000	80,000	120,000	150,000
Heating Output (Btu)	48,000	64,000	103,000	48,000	64,000	104,000	64,800	97,200	121,500
AFUE % <sup>5</sup>	81	81	80	81	81	80	81	81	81
Steady State Efficiency (%) <sup>5</sup>	81	81	80	81	81	80	81	81	81
No. Burners	2	2	3	2	2	3	2	3	3
No. Stages	1	1	1	1	1	1	1	1	2
Gas Supply Line Pressure									
Natural (minimum/maximum)	4.5/14.0			4.5/14.0			4.5/14.0		
LP (minimum/maximum)	10.0/14.0			10.0/14.0			10.0/14.0		
Gas Connection Pipe Size (in.)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	3/4
<b>Compressor</b>									
No./Type	1/Scroll			1/Scroll			1/Scroll		
<b>Outdoor Sound Rating (dB)<sup>6</sup></b>									
	84			84			89		
<b>Outdoor Coil -Type</b>									
Tube Size (in.) OD	Lanced			Lanced			Lanced		
Face Area (sq ft)	0.3125			0.3125			0.3125		
Rows/FPI	10.96			10.96			1700		
	3/17			3/17			3/17		
<b>Indoor Coil -Type</b>									
Tube Size (in.)	Lanced			Lanced			Lanced		
Face Area (sq ft)	0.3125			0.3125			0.3125		
Rows/FPI	7.71			7.71			9.89		
	4/16			4/16			3/16		
Refrigerant Control	Short Orifice			Short Orifice <sup>14</sup>			Short Orifice		
Drain Connection No./Size (in.)	1¾ NPT			1¾ NPT			1¾ NPT		
<b>Outdoor Fan -Type</b>									
No. Used/Diameter (in.)	Propeller			Propeller			Propeller		
DriveType/No. Speeds	1/22			1/22			1/26		
CFM	Direct/1			Direct/1 <sup>13</sup>			Direct/1		
No. Motors/HP	3,170			3,370			6100		
Motor RPM	1/0.33			1/0.33			1/0.70		
	1,075			1,075			1,075		



# General Data

## (5 - 6 Tons) High Efficiency

Table GD-6 — Continued

	5Ton Convertible Units		6Ton Convertible Units
	YHC060A1	YHC060A3, A4, AW	YHC072A3, A4, AW
<b>Direct Drive Indoor Fan</b> -Type	FC Centrifugal	FC Centrifugal	—
No. Used/Diameter (in.)	1/11 x 11 <sup>8</sup>	1/11 x 11 <sup>8</sup>	—
Drive Type/No. Speeds	Direct/2	Direct/2	—
No. Motors	1	1	—
Motor HP (Standard/Oversized)	0.90/1.00	0.90/1.00	—
Motor RPM (Standard/Oversized)	985/1,080 <sup>9</sup>	985/1,080 <sup>9</sup>	—
Motor Frame Size (Standard/Oversized)	48/48	48/48	—
<b>Belt Drive Indoor Fan</b> -Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter (in.)	1/11 x 11	1/11 x 11	1/12 x 12
Drive Type/No. Speeds	Belt/Variable Sheave <sup>11</sup>	Belt/Variable Sheave <sup>11</sup>	Belt/Variable Sheave
No. Motors	1	1	1
Motor HP (Standard/Oversized)	1.00/—	1.00/—	1.00/2.00
Motor RPM (Standard/Oversized)	1,750/—	1,750/—	1750,1750
Motor Frame Size (Standard/Oversized)	56/—	56/—	56/56
<b>Filters</b> -Type Furnished	Throwaway	Throwaway	Throwaway
(No.) Size Recommended	(2)20 x 30 x 1 <sup>12</sup>	(2) 20 x 30 x 1 <sup>12</sup>	(4) 16 x 25 x 2 <sup>12</sup>
<b>Optional Hot Gas Reheat Coil</b> -Type <sup>15</sup>	—	Lanced	—
Tube Size (in.)OD	—	0.375	—
Face Area (sq. ft.)	—	2.22	—
Rows/FPI	—	2/16	—
<b>Refrigerant Charge</b> (Lbs of R-22) <sup>7</sup>			
Standard	7.9	8.4	10.7
Optional Hot Gas Reheat Coil	—	10.7	—

Notes:

- Cooling Performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240.
- EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Integrated Part Load Value is rated in accordance with ARI Standard 210/240 or 360. Units are rated at 80° F ambient, 80° F entering dry bulb, and 67° F entering wet bulb at ARI rated cfm.
- Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4 % for each 1000 feet above sea level.
- AFUE is rated in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to Table PD-90.
- Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
- YHC060A Oversized Motor Fan Diameter is 12 x 11.
- Motor RPM shown is low speed. High speed Motor RPM is 1,100/1,135.
- YHC072A when applied in a horizontal configuration has an 11.3 EER and 6.2 System Power (kW).
- Belt Drive Motor is not available for YHC060A1.
- 2" pleated filters is a factory installed option. 2" pleated filters is standard with the Dehumidification (Hot Gas Reheat) option.
- With Dehumidification (Hot Gas Reheat) option: Direct/2.
- TXV is supplied from the factory as standard with the Dehumidification (Hot Gas Reheat) option.
- Available on three-phase only.



# General Data

(7½ - 10 Tons)  
High Efficiency

Table GD-7 — General Data

	7½Ton Convertible YHC092A3, A4, AW			8½Ton Convertible YHC102A3, A4, AW			10Ton Convertible YHC120A3, A4, AW		
<b>Cooling Performance<sup>1</sup></b>									
Gross Cooling Capacity	94,000			103,000			117,000		
EER <sup>2</sup>	11.5 <sup>8</sup>			11.5 <sup>9</sup>			11.2 <sup>10</sup>		
Nominal CFM / ARI Rated CFM	3,000/2,625			3,400/3,000			4,000/3,200		
ARI Net Cooling Capacity	90,000 <sup>8</sup>			98,000 <sup>9</sup>			109,000 <sup>10</sup>		
Integrated Part Load Value <sup>3</sup>	11.8 <sup>8</sup>			11.8 <sup>9</sup>			11.7 <sup>10</sup>		
System Power (KW)	7.83 <sup>8</sup>			8.52 <sup>9</sup>			9.73 <sup>10</sup>		
<b>Heating Performance<sup>4</sup></b>									
Heating Models	Low	Medium	High	Low	Medium	High	Low	Medium	High
Heating Input (Btu)	120,000	150,000	200,000	120,000	150,000	200,000	150,000	200,000	250,000
Heating Output (Btu)	97,200	121,500	162,000	97,200	121,500	162,000	121,500	162,000	202,500
AFUE% <sup>5</sup>	81	81	81	81	81	81	81	81	81
Steady State Efficiency (%)	81	81	80	81	81	80	81	81	81
No. Burners	3	3	4	3	3	4	3	4	5
No. Stages	1	2	2	1	2	2	2	2	2
Gas Supply Line Pressure									
Natural (minimum/maximum)	4.5/14.0			4.5/14.0			4.5/14.0		
LP (minimum/maximum)	10.0/14.0			10.0/14.0			10.0/14.0		
Gas Connection Pipe Size (in.)	1/2	3/4	3/4	1/2	3/4	3/4	3/4	3/4	3/4
<b>Compressor</b>									
No./Type	2/Scrolls			2/Scrolls			2/Scrolls		
<b>Outdoor Sound Rating (dB)<sup>6</sup></b>									
	91			89			88		
<b>Outdoor Coil -Type</b>									
Tube Size (in.) OD	Lanced			Lanced			Lanced		
Face Area (sq ft)	0.3125			0.3125			0.3125		
Rows/FPI	175			19.83			27.21		
	3/17			3/17			3/17		
<b>Indoor Coil -Type</b>									
Tube Size (in.)	Lanced			Lanced			Lanced		
Face Area (sq ft)	0.3125			0.3125			0.3125		
Rows/FPI	12.36			12.36			12.36		
	3/16			4/16			5/16		
Refrigerant Control	Short Orifice			Short Orifice			Short Orifice		
Drain Connection No./Size (in.)	1¾ NPT			1¾ NPT			1¾ NPT		
<b>Outdoor Fan -Type</b>									
No. Used/Diameter (in.)	Propeller			Propeller			Propeller		
Drive Type/No. Speeds	1/26			1/26			1/26		
CFM	Direct/1			Direct/1			Direct/1		
No. Motors/HP	6200			6600			7000		
Motor RPM	1/0.70			1/0.75			1/0.75		
	1075			1,075			1,075		
<b>Belt Drive Indoor Fan -Type</b>									
No. Used/Diameter (in.)	FC Centrifugal			FC Centrifugal			FC Centrifugal		
Drive Type/No. Speeds	1/15 x 15			1/15 x 15			1/15 x 15		
No. Motors	Belt/Variable Sheave			Belt/Variable Sheave			Belt/Variable Sheave		
Motor HP (Standard/Oversized)	1			1			1		
Motor RPM (Standard/Oversized)	2.00/3.00			2.00/3.00			3.00/5.00		
Motor Frame Size (Standard/Oversized)	1,750/1,750			1,750/1,750			1,750/3,450		
	56/56			56/56			56/56		
<b>Filters -Type Furnished <sup>11</sup></b>									
(No.) Size Recommended	Throwaway			Throwaway			Throwaway		
	(4) 20 x 25 x 2			(4) 20 x 25 x 2			(4) 20 x 25 x 2		
<b>Optional Reheat Coil -Type</b>									
Tube Size (in.) OD	Lanced			Lanced			Lanced		
Face Area (sq. ft.)	0.375			0.375			0.375		
Rows/FPI	5.19			5.19			5.19		
	2/16			2/16			2/16		
<b>Refrigerant Charge (Lbs of R-22)<sup>7</sup></b>									
	6.4 Circuit 1/6.2 Circuit 2			7.4 Circuit 1/7.1 Circuit 2			11.0 Circuit 1/7.3 Circuit 2		

Notes:

- Cooling Performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240.
- EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Integrated Part Load Value is rated in accordance with ARI Standard 210/240 or 360. Units are rated at 80° F ambient, 80° F entering dry bulb, and 67° F entering wet bulb at ARI rated cfm.
- Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.
- AFUE is rated in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to Table PD-90.
- Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
- YHC092A when applied in a horizontal configuration has an 11.3 EER, 89,000 ARI Net Cooling Capacity, 11.4 Integrated Part Load Value, and 7.88 System Power (KW).
- YHC102A when applied in horizontal configuration has an 11.3 EER, 11.3 IPLV, 97,000 ARI Net Cooling Capacity and 8.58 System Power (KW).
- YHC120A when applied in a horizontal configuration has an 10.7 EER, 11.2 IPLV, 108,000 ARI Net Cooling and 10.09 System Power (KW).
- Optional 2" pleated filters also available.



# Performance Data (3 Ton) Standard Efficiency

Table PD-1 — Gross Cooling Capacities (MBH) 3 Ton Single/Three Phase YSC036A1, A3, A4, AW

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter. Dry Bulb	Entering Wet Bulb (F)																							
		61		67		73		61		67		73		61		67		73		61		67		73	
	(F)	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
1080	75	34.6	29.0	38.6	22.3	40.6	14.7	31.2	27.3	36.6	21.1	39.5	13.8	28.2	25.6	33.4	19.6	37.8	12.9	25.1	24.1	29.6	18.2	35.5	11.9
	80	35.6	35.0	38.8	27.3	41.0	20.2	32.6	32.6	36.8	26.6	39.8	19.5	30.0	30.0	33.5	25.2	38.0	18.5	27.3	27.3	29.9	23.5	35.6	17.5
	85	37.6	37.6	39.2	32.5	41.5	24.7	35.6	35.6	37.2	32.2	40.1	24.2	32.8	32.8	34.2	31.0	38.2	23.8	30.1	30.1	30.7	29.3	35.8	23.0
	90	39.3	39.3	39.7	37.6	42.0	29.2	37.8	37.8	37.9	37.6	40.4	29.1	35.7	35.7	35.7	35.7	38.5	28.9	33.0	33.0	32.9	32.9	36.0	28.4
1200	75	35.6	30.9	39.0	22.8	40.9	14.9	32.2	29.2	37.3	22.1	39.8	14.1	29.0	27.5	34.3	20.7	38.2	13.1	25.9	25.9	30.4	19.0	36.0	12.1
	80	36.7	36.7	39.3	28.4	41.4	20.6	34.3	34.3	37.4	28.1	40.2	20.3	31.4	31.4	34.5	26.9	38.4	19.3	28.6	28.6	30.7	25.2	36.1	18.3
	85	38.7	38.7	39.7	33.9	41.9	25.3	37.0	37.0	37.9	34.0	40.5	25.0	34.5	34.5	35.3	33.2	38.7	24.8	31.5	31.5	31.7	31.6	36.3	24.2
	90	40.2	40.2	40.4	39.2	42.3	30.1	38.8	38.8	38.8	38.8	40.9	30.2	37.1	37.1	37.0	37.0	39.1	30.3	34.6	34.6	34.6	34.6	36.6	30.0
1320	75	36.4	32.6	39.4	23.5	41.1	15.1	33.2	31.0	37.7	23.0	40.1	14.3	29.8	29.3	34.9	21.8	38.5	13.4	26.8	26.8	30.9	20.0	36.3	12.4
	80	37.7	37.7	39.7	29.4	41.6	20.9	35.7	35.7	37.9	29.3	40.4	21.2	32.7	32.7	35.2	28.5	38.7	19.9	29.8	29.8	31.4	26.8	36.5	19.0
	85	39.4	39.4	40.2	35.2	42.1	25.9	37.9	37.9	38.5	35.6	40.8	25.7	35.9	35.9	36.2	35.3	39.1	25.7	32.9	32.9	32.9	32.9	36.7	25.3
	90	40.8	40.8	40.9	40.5	42.6	30.8	39.7	39.7	39.6	39.6	41.2	31.2	38.0	38.0	38.0	38.0	39.5	31.6	35.9	35.9	35.9	35.9	37.1	31.5
1440	75	37.0	34.1	39.7	24.0	41.3	15.3	34.1	32.8	38.0	23.7	40.3	14.5	30.6	30.6	35.5	22.7	38.7	13.6	27.7	27.7	31.4	21.0	36.6	12.6
	80	38.4	38.4	40.0	30.3	41.8	21.2	36.7	36.7	38.3	30.5	40.8	21.0	33.9	33.9	35.8	30.0	39.0	20.4	30.8	30.8	32.0	28.4	36.8	19.7
	85	40.0	40.0	40.6	36.3	42.4	26.4	38.7	38.7	39.0	37.0	41.2	26.7	36.8	36.8	36.8	36.8	39.4	26.6	34.2	34.2	34.2	34.2	37.0	26.4
	90	41.4	41.4	41.4	41.4	42.9	31.6	40.3	40.3	40.3	40.3	41.5	32.1	38.7	38.7	38.7	38.7	39.9	32.7	36.7	36.7	36.7	36.7	37.6	33.0

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

# Performance Data

## (4 Ton) Standard Efficiency

**Table PD-2 — Gross Cooling Capacities (MBH) 4 Ton Single Phase YSC048A1**

CFM Airflow		Ambient Temperature (F)																							
		85						95						105						115					
		Enter. Dry Bulb (F)	61		67		73		61	67	73	61	67	73	61	67	73	61	67	73	61	67	73		
			MBH	SHC	MBH	SHC	MBH	SHC																MBH	SHC
1440	75	45.5	38.7	52.4	30.0	56.4	20.1	41.6	36.6	49.0	28.3	54.4	18.9	37.6	34.5	44.4	26.7	51.8	17.5	33.5	32.3	39.8	24.5	48.0	15.8
	80	46.5	46.5	52.5	37.6	56.8	28.1	43.2	43.2	49.1	35.9	54.8	26.7	39.9	39.9	44.6	33.8	52.0	25.2	36.5	36.5	40.1	31.6	48.2	23.4
	85	50.3	50.3	53.0	45.1	57.4	34.9	47.0	47.0	49.7	43.7	55.0	33.9	43.6	43.6	45.3	41.6	52.2	32.8	40.2	40.2	41.0	39.5	48.3	31.0
	90	53.3	53.3	53.8	52.5	57.7	41.1	50.8	50.8	50.8	50.8	55.5	41.0	47.5	47.5	47.5	47.5	52.5	40.1	44.0	44.0	44.0	44.0	48.6	38.6
1600	75	46.8	41.3	53.1	31.3	56.9	20.5	42.7	39.1	50.1	29.7	55.0	19.2	38.7	37.0	45.4	27.5	52.4	17.9	34.4	34.4	40.8	25.4	48.9	16.3
	80	48.7	48.7	53.4	39.5	57.5	28.9	45.2	45.2	50.3	38.2	55.4	27.8	41.8	41.8	45.7	36.0	52.7	26.3	38.2	38.2	41.1	33.9	49.1	24.7
	85	52.2	52.2	53.9	47.5	58.1	36.1	49.3	49.3	51.0	46.7	55.7	35.3	45.7	45.7	46.7	44.7	52.9	34.5	42.1	42.1	42.1	42.1	49.2	33.0
	90	54.9	54.9	54.9	54.9	58.4	42.8	52.7	52.7	52.7	52.7	56.2	42.9	49.8	49.8	49.8	49.8	53.3	42.5	46.2	46.2	46.2	46.2	49.7	41.3
1760	75	48.1	43.8	53.6	32.5	57.3	20.8	43.8	41.6	50.8	31.1	55.5	19.6	39.8	39.5	46.3	29.0	52.9	18.2	35.8	35.8	41.5	26.7	49.6	16.7
	80	50.5	50.5	54.0	41.2	58.0	29.6	47.1	47.1	51.1	40.3	55.9	29.0	43.4	43.4	46.7	38.2	53.2	27.4	39.8	39.8	42.0	36.0	49.7	25.8
	85	53.6	53.6	54.8	49.8	58.6	37.1	51.1	51.1	52.0	49.4	56.3	36.6	47.7	47.7	48.1	47.9	53.5	36.1	43.9	43.9	43.9	43.9	49.9	34.9
	90	56.1	56.1	56.1	56.1	59.0	44.2	54.2	54.2	54.1	54.1	56.9	44.8	51.5	51.5	51.5	51.5	54.1	44.7	48.2	48.2	48.2	48.2	50.5	43.9
1920	75	49.1	46.3	54.2	33.5	57.7	21.2	44.9	44.0	51.5	32.4	55.9	20.0	40.7	40.7	47.1	30.4	53.3	18.6	37.0	37.0	42.2	28.1	50.1	17.0
	80	51.9	51.9	54.6	42.7	58.4	30.1	48.8	48.8	51.8	42.2	56.3	30.2	45.0	45.0	47.7	40.4	53.7	28.5	41.2	41.2	42.9	38.2	50.3	26.9
	85	54.7	54.7	55.5	51.8	59.1	38.1	52.5	52.5	52.9	51.8	56.8	37.8	49.4	49.4	49.4	49.4	54.1	37.6	45.5	45.5	45.5	45.5	50.5	36.6
	90	57.1	57.1	57.1	57.1	59.4	45.6	55.3	55.3	55.3	55.3	57.4	46.4	52.8	52.8	52.8	52.8	54.7	46.7	49.8	49.8	49.8	49.8	51.3	46.2

Notes:

- All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
- MBH = Total Gross Capacity
- SHC = Sensible Heat Capacity

**Table PD-3 — Gross Cooling Capacities (MBH) 4 Ton Three Phase YSC048A3, A4, AW**

CFM Airflow		Ambient Temperature (F)																									
		85						95						105						115							
		Enter. Dry Bulb (F)	61		67		73		Entering Wet Bulb (F)						61		67		73		61		67		73		
			MBH	SHC	MBH	SHC	MBH	SHC	61	SHC	67	SHC	61	SHC	67	SHC	61	SHC	67	SHC	61	SHC	67	SHC	61	SHC	67
1440	75	44.8	38.6	51.4	29.8	56.1	20.1	41.0	36.6	48.2	28.2	53.7	18.9	37.3	34.7	44.2	26.4	50.8	17.6	33.4	32.7	39.6	25.2	47.1	16.0		
	80	46.0	46.0	51.6	37.4	56.5	27.9	42.9	42.9	48.3	35.8	54.0	26.6	39.7	39.7	44.4	34.0	51.0	25.2	36.4	36.4	40.0	32.0	47.2	23.6		
	85	49.6	49.6	52.0	44.8	56.7	34.8	46.8	46.8	48.9	43.6	54.2	34.0	43.6	43.6	45.1	41.8	51.2	32.7	40.3	40.3	41.0	39.8	47.4	31.1		
	90	52.5	52.5	52.9	52.2	57.2	41.6	50.2	50.2	50.1	50.1	54.6	41.1	47.2	47.2	47.2	47.2	51.5	40.1	43.9	43.9	43.9	43.9	47.7	38.6		
1600	75	46.1	41.1	52.1	31.1	56.7	20.5	42.1	39.0	49.1	29.6	54.4	19.3	38.3	37.1	45.1	27.8	51.5	18.0	34.3	34.3	40.6	25.7	47.9	16.5		
	80	48.1	48.1	52.4	39.3	57.2	29.0	44.9	44.9	49.2	37.9	54.7	27.7	41.5	41.5	45.4	36.2	51.7	26.3	38.1	38.1	41.0	34.2	48.0	24.8		
	85	51.4	51.4	53.0	47.3	57.7	36.7	48.7	48.7	50.0	46.4	55.0	35.5	45.6	45.6	46.3	44.8	51.9	34.6	42.1	42.1	42.1	42.1	48.2	33.0		
	90	54.2	54.2	54.2	54.2	58.0	43.5	51.9	51.9	51.9	51.9	55.4	43.2	49.1	49.1	49.1	49.1	52.3	42.5	45.9	45.9	45.9	45.9	48.7	41.3		
1760	75	47.2	43.5	52.8	32.3	57.3	20.9	43.3	41.5	49.8	30.9	54.9	19.7	39.1	39.1	45.8	29.1	52.0	18.3	35.6	35.6	41.3	27.1	48.5	16.8		
	80	49.7	49.7	53.1	41.0	57.8	30.1	46.7	46.7	50.1	40.0	55.3	28.8	43.3	43.3	46.2	38.3	52.3	27.4	39.7	39.7	41.8	36.3	48.7	25.9		
	85	52.8	52.8	53.8	49.7	58.1	37.7	50.3	50.3	51.0	49.1	55.6	37.0	47.2	47.2	47.2	47.2	52.5	36.1	43.7	43.7	43.7	43.7	48.9	34.9		
	90	55.5	55.5	55.5	55.5	58.7	45.3	53.4	53.4	53.4	53.4	56.1	45.2	50.7	50.7	50.7	50.7	53.1	44.7	47.6	47.6	47.6	47.6	49.5	43.8		
1920	75	48.2	45.8	53.3	33.4	57.8	21.3	44.4	43.8	50.4	32.1	55.4	20.0	40.3	40.3	46.5	30.4	52.5	18.6	36.6	36.6	41.9	28.3	49.0	17.2		
	80	51.0	51.0	53.7	42.7	58.3	31.1	48.1	48.1	50.7	41.9	55.7	29.6	44.7	44.7	47.0	40.3	52.8	28.4	41.1	41.1	42.6	38.3	49.2	26.9		
	85	53.9	53.9	54.6	51.8	58.6	38.7	51.6	51.6	51.9	51.5	56.2	38.4	48.6	48.6	48.6	48.6	53.1	37.7	45.2	45.2	45.2	45.2	49.4	36.6		
	90	56.6	56.6	56.6	56.6	59.3	47.0	54.6	54.6	54.5	54.5	56.8	47.1	52.0	52.0	52.0	52.0	53.8	46.9	49.0	49.0	49.0	49.0	50.3	46.1		

Notes:

- All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
- MBH = Total Gross Capacity
- SHC = Sensible Heat Capacity



# Performance Data (5 - 6 Ton) Standard Efficiency

Table PD-4 — Gross Cooling Capacities (MBH) 5 Ton Single/Three Phase YSC060A1,A3,A4,AW, AK

		Ambient Temperature (F)																															
		85								95								105								115							
CFM Airflow	Enter. Dry Bulb (F)	61		67		73		Entering Wet Bulb (F)								61		67		73		61		67		73							
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC								
1800	75	57.4	49.1	64.8	37.9	69.2	25.3	53.3	47.0	61.8	36.3	67.2	24.1	49.4	45.0	57.6	34.3	64.3	22.8	45.2	42.9	52.4	32.7	60.6	21.2								
	80	59.0	59.0	65.1	47.1	69.8	35.0	55.6	55.6	62.0	45.7	67.6	33.8	52.2	52.2	57.8	43.9	64.6	32.3	48.6	48.6	52.8	41.6	60.8	30.6								
	85	63.1	63.1	65.7	56.2	70.2	42.9	60.3	60.3	62.7	55.3	68.0	42.3	56.8	56.8	58.9	53.6	64.9	41.3	52.9	52.9	54.0	51.4	61.0	39.9								
	90	66.4	66.4	66.9	65.2	70.8	51.0	64.1	64.1	64.1	68.5	50.8	61.1	61.1	61.1	61.1	65.4	50.1	57.5	57.5	57.5	57.5	61.5	49.0									
2000	75	59.0	52.2	65.7	39.4	69.8	25.7	54.9	50.1	62.8	37.9	67.8	24.6	50.7	48.0	58.9	36.1	64.9	23.2	46.5	45.9	53.5	33.8	61.3	21.6								
	80	61.3	61.3	66.0	49.2	70.2	35.6	58.1	58.1	63.1	48.2	68.1	34.8	54.4	54.4	59.2	46.6	65.3	33.7	50.6	50.6	54.0	44.3	61.5	32.0								
	85	65.1	65.1	66.8	59.1	70.9	44.2	62.5	62.5	64.0	58.5	68.7	43.8	59.3	59.3	60.4	57.3	65.7	43.1	55.2	55.2	55.8	55.2	61.8	41.9								
	90	68.1	68.1	68.0	68.0	71.6	52.9	65.9	65.9	65.9	65.9	69.4	52.9	63.1	63.1	63.1	66.3	52.5	59.7	59.7	59.7	59.7	62.4	51.7									
2200	75	60.3	55.2	66.3	40.6	70.2	26.1	56.3	53.1	63.6	39.5	68.2	25.0	52.0	51.0	59.9	37.8	65.4	23.6	47.7	47.7	54.5	35.4	61.8	22.0								
	80	63.1	63.1	66.8	51.2	70.8	37.9	60.2	60.2	64.0	50.5	68.7	35.6	56.5	56.5	60.3	49.1	65.8	34.6	52.4	52.4	55.2	46.9	62.1	33.3								
	85	66.5	66.5	67.7	61.6	71.5	45.4	64.2	64.2	65.0	61.3	69.4	45.2	61.2	61.2	61.7	60.5	66.4	44.7	57.3	57.3	57.3	57.3	62.5	43.8								
	90	69.4	69.4	69.3	69.3	72.2	54.6	67.3	67.3	67.3	70.1	54.9		64.6	64.6	64.6	64.6	67.1	54.8	61.2	61.2	61.2	61.2	63.2	54.2								
2400	75	61.5	58.0	66.9	41.8	70.6	26.5	57.6	56.0	64.2	40.8	68.6	25.4	53.0	53.0	60.6	39.3	65.9	24.0	49.1	49.1	55.4	37.1	62.2	22.4								
	80	64.5	64.5	67.5	53.0	71.2	38.8	61.8	61.8	64.7	52.5	69.1	36.4	58.3	58.3	61.1	51.4	66.3	35.5	53.9	53.9	56.3	49.5	62.5	34.3								
	85	67.7	67.7	68.5	63.9	72.0	46.5	65.4	65.4	65.9	63.9	69.9	46.5	62.5	62.5	62.5	62.5	66.9	46.2	58.9	58.9	58.9	58.9	63.0	45.5								
	90	70.4	70.4	70.4	70.4	72.8	56.1	68.4	68.4	68.4	70.6	56.6		65.8	65.8	65.8	65.8	67.7	56.8	62.4	62.4	62.4	62.4	63.9	56.5								

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

Table PD-5 — Gross Cooling Capacities (MBH) 6 Ton Three Phase YSC072A3,A4,AW, AK

		Ambient Temperature (F)																															
		85								95								105								115							
CFM	Enter. Dry Bulb	61		67		73		Entering Wet Bulb (F)																									
		61	SHC	67	SHC	73	SHC	61	SHC	67	SHC	73	SHC	61	SHC	67	SHC	73	SHC	61	SHC	67	SHC	73	SHC								
Airflow	(F)	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC								
2160	75	65.9	55.0	73.4	43.5	76.7	28.3	61.0	52.5	70.7	40.9	75.4	27.3	56.3	50.1	66.3	38.8	73.2	26.0	51.7	47.7	60.9	36.4	70.3	24.6								
	80	67.6	66.2	73.7	52.2	77.5	38.9	63.2	63.2	70.9	51.1	76.0	37.8	59.2	59.2	66.4	49.1	73.7	36.4	55.3	55.3	61.0	46.6	70.6	34.9								
	85	71.4	71.4	74.2	61.9	78.6	47.4	68.5	68.5	71.4	61.3	76.5	46.6	64.4	64.4	67.3	59.7	74.0	46.0	60.4	60.4	62.2	57.3	70.8	45.0								
	90	74.6	74.6	75.3	71.3	79.3	55.7	72.4	72.4	72.8	71.3	77.2	55.5	69.5	69.5	69.5	69.5	74.6	55.4	65.7	65.7	65.6	65.6	71.2	54.8								
2400	75	67.7	58.3	74.0	43.8	77.1	28.7	62.9	55.9	71.7	42.6	75.9	27.7	57.9	53.4	67.9	40.8	73.7	26.4	53.2	51.0	62.4	38.3	70.9	25.0								
	80	69.7	69.7	74.6	54.1	78.0	39.5	66.2	66.2	72.0	53.6	76.6	39.2	61.8	61.8	68.0	52.0	74.3	37.9	57.8	57.8	62.6	49.6	71.3	36.3								
	85	73.4	73.4	75.3	64.5	79.0	48.2	70.9	70.9	72.7	64.5	77.2	47.9	67.4	67.4	69.1	63.6	74.8	47.6	63.2	63.2	64.2	61.4	71.7	47.0								
	90	76.2	76.2	76.5	74.3	79.9	57.1	74.3	74.3	74.3	74.3	77.9	57.4	71.7	71.7	71.7	71.7	75.5	57.7	68.5	68.5	68.4	68.4	72.2	57.5								
2640	75	69.1	61.4	74.7	44.9	77.4	29.0	64.5	59.1	72.5	44.3	76.2	28.1	59.4	56.6	69.0	42.5	74.2	26.9	54.7	54.2	63.6	40.1	71.3	25.4								
	80	71.6	71.6	75.3	55.8	78.4	40.0	68.6	68.6	72.8	55.8	77.0	41.1	64.2	64.2	69.1	54.7	74.6	38.6	60.0	60.0	63.9	52.4	71.9	37.7								
	85	74.8	74.8	76.1	66.8	79.4	49.1	72.7	72.7	73.8	67.3	77.8	49.3	69.7	69.7	70.5	66.9	75.4	49.1	65.7	65.7	66.1	65.4	72.3	48.7								
	90	77.4	77.4	77.5	76.8	80.3	58.4	75.8	75.8	75.8	75.8	78.5	59.0	73.4	73.4	73.3	73.3	76.2	59.7	70.5	70.5	70.5	70.5	73.0	59.8								
2880	75	70.2	64.1	75.2	45.8	77.6	29.4	66.1	62.3	73.1	45.4	76.5	28.5	60.9	59.7	69.8	44.2	74.5	27.3	56.2	56.2	64.7	41.9	71.7	25.8								
	80	72.9	72.9	75.9	57.4	78.7	40.4	70.3	70.3	73.6	57.8	77.3	41.8	66.5	66.5	70.1	57.1	75.2	41.1	62.0	62.0	65.2	55.2	72.1	38.5								
	85	75.9	75.9	76.8	68.8	79.7	49.9	74.0	74.0	74.7	69.8	78.5	50.6	71.3	71.3	71.6	69.8	75.9	50.4	67.8	67.8	67.7	67.7	72.9	50.1								
	90	78.3	78.3	78.3	78.3	80.7	59.6	76.8	76.8	76.8	79.0	60.5		74.6	74.6	74.6	74.6	76.7	61.6	71.9	71.9	71.9	71.9	73.7	61.9								

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

# Performance Data (7½ Ton) Standard Efficiency

**Table PD-6 — Gross Cooling Capacities (MBH) 7½ Ton Single Compressor Three Phase YSC090A3,A4,AW, AK**

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter. Dry Bulb	61		67		73		61		67		73		61		67		73		61		67		73	
	(F)	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
2700	75	87.4	73.8	96.2	56.7	98.8	36.7	80.6	70.3	93.3	54.3	98.8	35.6	73.5	66.6	86.9	51.2	96.8	33.9	66.6	63.1	78.4	48.2	92.8	31.8
	80	89.6	88.9	96.6	68.7	100.0	49.9	83.4	83.4	93.5	68.3	99.9	50.2	77.6	77.6	87.2	65.3	97.4	48.2	71.6	71.6	78.9	61.5	92.9	46.0
	85	94.2	94.2	97.5	81.6	101.2	60.4	90.4	90.4	94.4	82.2	100.9	61.9	84.8	84.8	88.5	79.8	97.8	61.4	78.5	78.5	80.7	76.2	93.2	59.9
	90	98.0	98.0	98.7	93.9	102.3	71.0	95.8	95.8	96.2	95.8	101.2	72.9	91.6	91.6	91.6	91.6	98.5	74.3	86.0	86.0	86.0	86.0	93.7	73.5
3000	75	89.7	78.4	96.7	57.3	99.1	37.2	83.0	75.0	94.6	56.7	99.2	36.1	75.8	71.3	88.9	53.9	97.5	34.5	68.7	67.7	80.3	50.1	93.8	32.5
	80	92.2	92.2	97.5	70.9	100.3	50.4	87.4	87.4	95.0	71.8	100.4	50.9	81.4	81.4	89.3	69.5	98.3	50.3	75.0	75.0	81.1	65.8	94.1	48.1
	85	96.5	96.5	98.5	84.4	101.5	61.2	93.8	93.8	96.1	86.6	101.6	63.4	88.9	88.9	91.0	85.5	98.8	63.7	82.5	82.5	83.7	82.1	94.4	63.1
	90	99.5	99.5	99.9	97.0	102.6	72.3	98.2	98.2	98.2	98.2	101.9	75.0	94.9	94.9	94.9	94.9	99.7	77.4	90.1	90.1	90.0	90.0	95.3	77.7
3300	75	91.5	82.5	97.7	59.0	99.3	37.7	85.2	79.6	95.5	58.8	99.5	36.6	78.0	76.0	90.5	56.5	98.0	35.1	70.5	70.5	82.1	52.8	94.5	33.2
	80	94.4	94.4	98.1	72.8	100.5	55.0	90.7	90.7	96.2	74.8	100.8	51.6	84.7	84.7	91.1	73.5	98.9	51.5	78.0	78.0	83.2	70.0	95.0	50.1
	85	98.0	98.0	99.2	86.8	101.7	62.0	96.1	96.1	97.5	90.5	102.0	64.7	92.0	92.0	93.1	90.6	99.5	65.6	86.2	86.2	86.2	86.2	95.4	65.8
	90	100.5	100.5	100.7	99.4	102.8	73.4	99.9	99.9	99.9	99.9	102.4	76.8	97.2	97.2	97.2	97.2	100.5	80.1	93.0	93.0	93.0	93.0	96.5	81.4
3600	75	92.9	86.2	98.1	59.9	99.4	38.2	87.3	84.1	96.3	60.6	99.8	37.2	79.6	79.6	91.7	58.9	98.3	35.7	72.9	72.9	83.7	55.4	95.1	33.8
	80	96.0	96.0	98.6	74.3	100.7	56.8	93.1	93.1	97.1	77.5	101.0	55.7	87.6	87.6	92.5	77.2	99.5	52.7	80.7	80.7	85.1	74.1	95.5	51.6
	85	99.0	99.0	99.7	88.7	101.8	62.7	97.8	97.8	98.6	93.7	102.3	65.8	94.4	94.4	94.4	94.4	100.0	67.3	89.1	89.1	89.1	89.1	96.3	68.3
	90	101.1	101.1	101.1	101.1	103.0	74.4	101.0	101.0	101.0	101.0	102.8	78.4	98.9	98.9	98.9	98.9	101.2	82.4	95.1	95.1	95.1	95.1	97.5	84.6

**Notes:**

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

**Table PD-7 — Gross Cooling Capacities (MBH) 7½ Ton Dual Compressors Three Phase YSC092A3,A4,AW**

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter. Dry Bulb	61		67		73		61		67		73		61		67		73		61		67		73	
	(F)	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
2700	75	84.6	72.9	93.9	55.3	98.4	36.4	78.2	69.6	90.1	53.3	96.9	35.1	71.8	66.3	83.9	50.4	94.0	33.3	65.3	63.1	76.5	47.1	89.4	31.2
	80	86.8	86.8	94.4	68.5	99.6	50.0	81.8	81.8	90.5	67.5	98.0	49.7	76.4	76.4	84.3	64.7	94.5	47.5	70.9	70.9	77.1	61.4	89.6	45.3
	85	92.2	92.2	95.4	81.7	100.8	61.3	88.4	88.4	91.5	81.5	99.0	62.4	83.2	83.2	85.8	79.3	94.9	60.9	77.6	77.6	79.0	76.1	89.9	59.3
	90	96.3	96.3	96.9	94.4	102.0	72.8	93.6	93.6	93.6	93.6	99.3	73.4	89.6	89.6	89.6	89.6	95.8	74.0	84.5	84.5	84.5	84.5	90.6	73.0
3000	75	86.8	77.5	94.7	57.0	98.9	37.1	80.5	74.4	91.5	55.8	97.6	35.7	74.0	71.1	85.6	53.1	94.8	34.0	67.1	67.1	78.2	49.8	90.5	31.9
	80	90.1	90.1	95.6	71.2	100.2	50.8	85.4	85.4	92.0	71.1	98.7	50.7	79.9	79.9	86.3	68.9	95.5	49.6	74.1	74.1	79.1	65.7	90.8	47.4
	85	94.7	94.7	96.8	85.3	101.4	62.7	91.5	91.5	93.3	86.2	99.7	63.7	86.9	86.9	88.2	84.9	96.1	63.5	81.3	81.3	81.2	81.2	91.2	62.6
	90	98.3	98.3	98.3	98.3	102.7	74.8	96.2	96.2	96.1	96.1	100.3	76.2	92.7	92.7	92.7	92.7	97.1	77.5	88.0	88.0	88.0	88.0	92.2	77.4
3300	75	88.7	81.9	95.7	58.9	99.3	37.6	82.6	79.0	92.5	58.2	98.1	36.2	75.5	75.5	87.1	55.7	95.4	34.6	69.6	69.6	79.6	52.4	91.3	32.5
	80	92.3	92.3	96.5	73.7	100.7	51.5	88.4	88.4	93.2	74.4	99.3	51.7	82.9	82.9	87.9	72.8	96.1	51.0	76.9	76.9	80.8	69.8	91.7	49.5
	85	96.5	96.5	97.8	88.4	102.0	63.9	93.8	93.8	94.8	90.3	100.0	65.0	89.8	89.8	89.8	89.8	96.9	65.8	84.4	84.4	84.4	84.4	92.3	65.5
	90	99.7	99.7	99.7	99.7	103.3	76.5	98.0	98.0	98.0	98.0	101.1	78.5	94.9	94.9	94.9	94.9	98.1	80.6	90.7	90.7	90.7	90.7	93.5	81.3
3600	75	90.2	85.7	96.4	60.6	99.7	38.1	84.6	83.6	93.3	60.0	98.5	36.8	77.9	77.9	88.2	58.1	96.0	35.2	71.8	71.8	80.9	55.0	92.0	33.2
	80	94.0	94.0	97.2	75.8	101.0	52.1	90.7	90.7	94.3	77.4	99.7	52.6	85.6	85.6	89.2	76.6	96.6	52.0	79.5	79.5	82.3	73.8	92.5	51.5
	85	97.8	97.8	97.8	91.1	102.4	65.0	95.6	95.6	96.1	93.9	100.5	66.3	91.9	91.9	91.9	91.9	97.6	67.9	86.9	86.9	86.9	86.9	93.1	68.2
	90	100.8	100.8	100.8	100.8	103.7	78.1	99.3	99.3	99.3	99.3	101.7	80.7	96.6	96.6	96.6	96.6	98.9	83.4	92.7	92.7	92.7	92.7	94.6	84.9

**Notes:**

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity



# Performance Data

## (8½ - 10 Ton) Standard Efficiency

**Table PD-8 — Gross Cooling Capacities (MBH) 8½ Ton Three Phase YSC102A3, A4, AW, AK**

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter. Dry Bulb (F)	61		67		73		61		67		73		61		67		73		61		67		73	
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC		
3060	75	96.3	82.3	106.6	62.7	112.5	41.5	89.0	78.5	103.2	60.6	110.9	40.0	81.8	74.9	96.6	57.5	107.6	38.1	74.9	71.3	87.6	55.2	102.5	35.8
	80	98.0	98.0	107.2	77.1	113.7	57.0	92.9	91.4	103.4	76.3	111.5	57.1	86.3	86.2	96.9	73.3	108.2	54.0	80.2	80.2	88.1	69.4	102.8	51.5
	85	103.9	103.9	108.1	91.7	114.8	69.6	100.1	100.1	104.3	91.7	112.4	70.0	94.3	94.3	98.3	89.5	108.6	68.9	87.6	87.6	89.9	85.7	103.1	67.1
	90	108.6	108.6	109.6	105.7	116.0	82.4	105.9	105.9	105.9	105.9	113.2	83.0	101.6	101.6	101.9	100.2	109.3	83.4	95.6	95.6	95.6	95.5	103.6	82.3
3400	75	98.7	87.2	107.8	65.9	113.0	42.0	91.8	83.8	104.7	63.7	111.8	40.7	84.2	80.0	98.7	60.5	108.6	38.9	76.3	76.3	89.6	58.6	103.7	36.5
	80	101.6	100.0	108.5	80.1	114.6	58.1	96.9	96.5	105.0	80.1	112.8	57.8	90.3	90.3	99.1	77.9	109.3	56.3	83.8	83.8	90.3	74.0	104.0	53.8
	85	106.8	106.8	109.6	95.7	115.8	71.4	103.6	103.6	106.2	96.7	114.0	70.7	98.7	98.7	100.9	95.5	109.8	71.7	91.7	91.7	91.7	91.7	104.3	70.7
	90	111.0	111.0	111.0	111.0	117.0	84.9	108.8	108.8	108.9	107.2	114.4	86.1	105.1	105.1	105.0	104.8	110.7	87.4	99.8	99.8	99.7	99.7	105.2	87.1
3740	75	100.7	91.7	109.2	64.5	114.0	42.8	93.8	88.7	106.1	66.5	113.5	41.7	85.4	85.4	100.4	63.3	109.4	39.6	79.4	77.5	91.3	59.4	104.6	37.2
	80	104.1	103.6	109.6	82.9	115.3	59.0	100.0	100.0	106.6	84.3	113.7	59.0	94.0	94.0	100.9	82.2	109.6	60.2	87.0	87.0	92.2	78.5	105.1	56.0
	85	108.9	108.9	110.9	99.2	116.6	73.0	106.7	106.7	108.3	102.4	114.8	74.4	102.0	102.0	102.0	102.0	110.8	74.3	95.6	95.6	96.4	93.7	105.5	73.9
	90	112.8	112.8	112.8	112.8	117.8	87.2	111.8	111.8	111.8	111.2	116.0	90.0	107.7	107.7	107.7	107.7	111.9	90.9	102.9	102.9	102.9	102.9	106.6	91.4
4080	75	102.3	95.8	110.2	66.1	114.6	43.5	95.2	95.2	106.7	68.3	113.1	42.2	88.2	88.2	101.6	65.9	110.1	40.3	81.6	80.6	92.7	62.1	105.3	38.1
	80	106.2	106.2	110.5	85.3	115.9	59.8	102.8	102.8	107.4	86.8	114.3	60.0	97.4	97.4	102.4	86.2	111.0	58.6	89.9	89.9	94.1	82.9	105.9	58.2
	85	110.5	110.5	111.9	102.3	117.2	74.4	108.3	108.3	109.2	105.1	115.5	76.3	104.5	104.5	104.4	104.4	111.5	77.2	98.7	98.7	99.0	97.4	106.4	76.8
	90	114.2	114.2	114.2	114.2	118.5	89.3	112.7	112.7	112.7	112.7	116.8	92.7	109.7	109.7	109.7	109.7	112.9	94.2	105.2	105.2	105.2	105.2	107.8	95.4

**Notes:**

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

**Table PD-9— Gross Cooling Capacities (MBH) 10 Ton Three Phase YSC120A3, A4, AW, AK**

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter. Dry Bulb (F)	Entering Wet Bulb (F)																							
		61		67		73		61		67		73		61		67		73		61		67		73	
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
3600	75	108.6	95.7	120.5	71.5	126.0	46.0	100.1	91.3	115.5	68.8	123.6	43.3	91.0	86.5	107.2	64.9	119.3	41.0	82.2	82.0	96.5	60.1	113.1	37.9
	80	112.8	112.8	121.2	89.2	127.5	65.7	106.3	106.3	116.1	88.1	124.8	62.8	98.5	98.5	108.2	84.5	120.1	60.5	90.5	90.5	97.8	79.7	113.6	57.4
	85	119.5	119.5	122.6	106.9	129.0	78.5	114.8	114.8	117.7	107.0	126.2	79.2	108.2	108.2	110.5	104.5	121.8	76.8	100.1	100.1	100.1	100.1	114.2	76.6
	90	124.3	124.3	124.6	123.6	130.4	93.6	121.0	121.0	121.0	121.0	127.6	95.7	116.0	116.0	116.0	116.0	122.0	95.1	109.4	109.4	109.4	109.4	115.3	94.5
4000	75	111.6	102.3	121.7	73.9	126.7	46.9	103.4	98.1	117.1	72.3	124.5	42.7	94.2	93.4	109.5	68.7	120.2	41.9	85.3	85.3	98.8	64.0	114.3	38.8
	80	116.7	116.7	122.6	92.7	128.2	64.5	111.1	111.1	118.0	93.0	125.7	64.2	103.4	103.4	110.8	90.4	121.4	63.2	95.0	95.0	100.6	85.8	114.9	60.3
	85	122.3	122.3	124.2	111.4	129.7	80.2	118.5	118.5	120.0	113.1	127.1	81.6	112.8	112.8	113.6	112.1	122.6	82.1	105.1	105.1	105.1	105.1	115.6	80.4
	90	126.9	126.9	126.4	126.4	131.3	96.0	123.7	123.7	123.7	123.7	128.7	99.0	119.3	119.3	119.3	119.3	124.1	100.7	113.4	113.4	113.4	113.4	117.1	100.0
4400	75	114.1	108.4	122.5	75.8	127.3	47.7	106.5	104.9	118.4	75.8	124.9	45.4	97.1	97.1	111.3	72.3	121.3	40.2	88.6	88.6	100.9	67.7	115.1	39.7
	80	119.5	119.5	123.8	96.1	128.9	65.5	114.7	114.7	119.5	97.3	126.3	69.2	107.7	107.7	112.9	95.9	122.2	64.9	99.0	99.0	103.1	91.7	115.8	63.2
	85	124.9	124.9	125.5	115.5	130.4	81.9	121.1	121.1	121.8	118.3	127.9	83.7	116.0	116.0	116.0	116.0	123.6	85.0	109.2	109.2	109.2	109.2	116.8	84.0
	90	127.9	127.9	128.0	128.0	132.0	98.3	126.1	126.1	125.6	125.6	129.5	101.8	121.7	121.7	121.7	121.7	125.3	104.7	116.2	116.2	116.2	116.2	118.5	104.7
4800	75	116.1	113.8	123.1	77.6	127.8	48.5	108.9	108.9	119.2	78.1	125.4	46.2	100.5	100.5	112.8	76.1	121.4	43.6	91.6	91.6	102.6	71.3	115.8	40.6
	80	121.4	121.4	124.5	98.6	129.4	66.4	117.3	117.3	120.8	101.1	126.9	66.5	111.1	111.1	114.6	100.9	122.9	66.4	102.5	102.5	105.4	97.5	116.5	65.7
	85	126.0	126.0	126.4	118.6	130.9	83.4	122.9	122.9	123.2	122.6	128.5	85.6	118.4	118.4	118.4	118.4	124.3	87.5	112.1	112.1	112.1	112.1	117.8	87.3
	90	129.1	129.1	129.1	129.1	132.5	100.4	127.2	127.2	126.9	126.9	130.2	104.4	124.0	124.0	123.7	123.7	126.2	108.0	118.2	118.2	118.2	118.2	119.7	108.9

**Notes:**

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity





# Performance Data

## (3 - 4 Tons) High Efficiency

**Table PD-10 — Gross Cooling Capacities (MBH) 3 Ton YHC036A1, A3, A4, AW**

CFM Airflow		Ambient Temperature (F)																								
		85						95						105						115						
		Enter. Dry Bulb	61		67		73		61		67		73		61		67		73		61		67		73	
			MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
1080	75	34.2	29.2	39.8	22.7	43.1	15.2	31.1	27.4	37.0	21.2	41.3	14.1	28.0	25.7	33.3	19.8	39.0	12.9	24.8	24.0	29.8	18.1	36.1	11.6	
	80	34.9	34.9	40.0	28.5	43.5	21.3	32.3	32.3	37.1	27.1	41.6	20.1	29.7	29.7	33.5	25.3	39.2	18.8	27.1	27.1	30.0	23.6	36.2	17.5	
	85	37.9	37.9	40.3	34.3	44.0	26.5	35.3	35.3	37.5	33.0	41.9	25.6	32.6	32.6	34.0	31.3	39.5	24.6	30.0	30.0	30.6	29.6	36.4	23.2	
	90	40.5	40.5	40.9	40.0	44.5	31.7	38.4	38.4	38.4	38.4	42.3	31.0	35.7	35.7	35.7	35.7	39.7	30.3	32.9	32.9	32.9	32.9	36.7	29.0	
1200	75	35.3	31.2	40.4	23.7	43.5	15.5	32.0	29.4	37.8	22.4	41.8	14.4	28.8	27.7	34.1	20.6	39.5	13.2	25.5	25.5	30.5	18.8	36.7	11.9	
	80	36.7	36.7	40.7	30.0	44.0	21.9	33.9	33.9	38.0	28.9	42.1	20.9	31.2	31.2	34.4	27.1	39.8	19.7	28.5	28.5	30.8	25.3	36.9	18.4	
	85	39.6	39.6	41.1	36.3	44.6	27.4	37.1	37.1	38.5	35.4	42.5	26.8	34.3	34.3	35.1	33.8	40.0	26.0	31.5	31.5	31.5	31.5	37.1	24.8	
	90	41.9	41.9	41.9	41.9	45.1	33.0	39.9	39.9	39.9	39.9	42.9	32.6	37.6	37.6	37.6	37.6	40.4	32.1	34.7	34.7	34.7	34.7	37.4	31.1	
1320	75	36.2	33.2	40.9	24.7	43.8	15.8	32.8	31.4	38.4	23.4	42.1	14.7	29.4	29.4	34.8	21.7	39.9	13.5	26.5	26.5	31.0	19.9	37.2	12.2	
	80	38.2	38.2	41.2	31.4	44.4	22.4	35.4	35.4	38.7	30.5	42.6	21.7	32.5	32.5	35.2	28.9	40.2	20.5	29.7	29.7	31.5	27.1	37.4	19.2	
	85	40.8	40.8	41.8	38.1	45.0	28.3	38.7	38.7	39.4	37.6	43.1	28.0	35.9	35.9	36.2	36.2	40.5	27.2	32.9	32.9	32.9	32.9	37.6	26.2	
	90	42.9	42.9	42.9	42.9	45.6	34.2	41.1	41.1	41.1	41.1	43.4	34.0	38.9	38.9	38.9	38.9	41.0	33.8	36.3	36.3	36.3	36.3	38.1	33.1	
1440	75	37.1	35.1	41.3	25.5	44.1	16.1	33.6	33.3	38.9	24.4	42.4	15.0	30.4	30.4	35.5	22.8	40.2	13.8	27.5	27.5	31.5	21.0	37.5	12.5	
	80	39.4	39.4	41.7	32.6	44.7	22.9	36.8	36.8	39.3	32.1	42.9	22.3	33.8	33.8	35.9	30.6	40.6	21.4	30.8	30.8	32.1	28.8	37.8	20.1	
	85	41.7	41.7	42.4	39.7	45.3	29.0	39.8	39.8	40.1	39.5	43.5	29.0	37.3	37.3	37.3	37.3	40.9	28.3	34.2	34.2	34.2	34.2	38.0	27.6	
	90	43.7	43.7	43.7	43.7	45.9	35.3	42.1	42.1	42.1	42.1	43.9	35.3	40.0	40.0	40.0	40.0	41.5	35.4	37.5	37.5	37.5	37.5	38.6	34.9	

**Notes:**

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

**Table PD-11 — Gross Cooling Capacities (MBH) 4 Ton YHC048A1, A3, A4, AW**

CFM Airflow		Ambient Temperature (F)																															
		85								95								105								115							
		Enter. Dry Bulb																															
			61		67		73		61		67		73		61		67		73		61		67		73								
		(F)	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC							
1440	75	45.3	39.9	51.4	30.3	54.9	19.9	41.1	37.7	48.4	28.8	53.1	18.7	37.1	35.6	43.9	26.7	51.0	17.4	33.2	33.2	39.3	24.6	47.8	16.0								
	80	47.1	47.1	52.0	38.4	55.5	28.1	43.8	43.8	48.7	36.9	54.6	27.2	40.3	40.3	44.3	34.9	51.3	25.6	36.9	36.9	39.8	32.8	47.9	24.1								
	85	50.5	50.5	52.5	46.3	56.2	34.5	47.8	47.8	49.4	45.2	54.9	34.9	44.3	44.3	45.3	43.3	51.6	33.6	40.9	40.9	40.9	40.9	48.1	32.2								
	90	53.1	53.1	53.5	53.5	56.9	41.4	51.2	51.2	51.2	51.2	54.6	41.4	48.4	48.4	48.4	48.4	52.0	41.2	45.0	45.0	45.0	45.0	48.6	40.2								
1600	75	46.7	42.7	52.7	31.9	55.2	20.2	42.4	40.5	49.4	30.3	54.4	19.3	38.2	38.2	45.0	28.4	51.6	17.8	34.7	34.7	40.2	26.2	48.6	16.4								
	80	49.2	49.2	52.8	40.4	55.9	28.2	46.0	46.0	49.8	39.4	55.2	28.4	42.3	42.3	45.6	37.5	51.9	26.9	38.7	38.7	40.9	35.3	48.7	25.4								
	85	52.1	52.1	53.5	48.8	56.6	35.4	49.9	49.9	50.6	48.3	55.7	36.8	46.7	46.7	47.0	46.8	52.2	35.2	43.0	43.0	42.9	42.9	49.0	34.3								
	90	54.5	54.5	54.8	54.8	57.4	42.7	52.8	52.8	52.8	52.8	55.2	42.9	50.5	50.5	50.5	50.5	52.9	43.5	47.4	47.4	47.4	47.4	49.6	43.0								
1760	75	47.8	45.4	53.2	33.4	55.5	20.6	43.7	43.3	50.1	31.8	54.7	19.6	39.7	39.7	46.0	30.0	51.9	18.2	36.1	36.1	41.0	27.7	49.1	16.8								
	80	50.6	50.6	53.4	42.1	56.2	28.7	47.8	47.8	50.5	41.5	55.7	29.4	44.1	44.1	46.7	39.9	52.4	28.1	40.4	40.4	41.9	37.8	49.3	26.7								
	85	53.1	53.1	54.2	50.9	57.0	36.2	51.4	51.4	51.6	51.0	56.2	38.0	48.6	48.6	48.6	48.6	52.8	36.7	44.9	44.9	44.9	44.9	49.7	36.3								
	90	55.1	55.1	55.7	55.7	57.7	43.8	53.9	53.9	53.9	53.9	55.6	44.3	51.9	51.9	51.9	51.9	53.5	45.6	49.2	49.2	49.2	49.2	50.5	45.7								
1920	75	48.8	48.1	53.6	34.4	55.7	20.9	45.0	45.0	50.6	33.2	55.0	20.0	41.0	41.0	46.8	31.5	52.3	18.5	37.3	37.3	41.7	29.3	49.6	17.2								
	80	51.7	51.7	53.9	43.5	56.4	31.7	49.3	49.3	51.2	43.5	56.0	30.1	45.8	45.8	47.6	42.3	52.8	28.9	41.8	41.8	42.8	40.2	49.8	27.9								
	85	53.9	53.9	54.8	52.7	57.2	36.9	52.4	52.4	52.4	52.4	56.5	39.1	50.0	50.0	50.0	50.0	53.2	38.1	46.6	46.6	46.6	46.6	50.3	38.1								
	90	55.7	55.7	56.3	56.3	58.0	44.8	54.7	54.7	54.7	54.7	56.0	45.6	53.0	53.0	53.0	53.0	54.0	47.4	50.5	50.5	50.5	50.5	51.2	48.1								

**Notes:**

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity



# Performance Data

## (5 Ton) High Efficiency

Table PD-12 — Gross Cooling Capacities (MBH) 5 Ton Single Phase YHC060A1

CFM Airflow		Ambient Temperature (F)																									
		85						95						105						115							
		Enter. Dry Bulb		61		67		73		61		67		73		61		67		73		61		67		73	
MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
1800	75	56.2	48.2	64.3	37.8	68.4	24.8	51.4	45.6	60.5	35.2	66.7	23.5	46.8	43.2	55.3	32.8	63.9	21.9	42.2	40.8	50.0	31.0	59.9	20.1		
	80	57.6	57.6	64.6	46.6	69.3	34.7	53.7	53.7	60.7	44.8	67.3	33.1	49.8	49.8	55.5	42.3	64.2	31.5	45.9	45.9	50.5	39.9	60.1	29.6		
	85	62.2	62.2	65.2	55.8	70.1	42.6	58.4	58.4	61.4	54.5	68.0	42.2	54.5	54.5	56.5	52.0	64.6	40.9	50.6	50.6	51.6	49.7	60.3	39.0		
	90	65.8	65.8	66.3	64.9	70.9	50.8	63.0	63.0	63.0	63.0	68.2	52.0	59.3	59.3	59.2	59.2	65.0	49.9	55.3	55.3	55.3	55.3	60.7	48.5		
2000	75	57.8	51.4	65.2	38.8	69.6	25.4	52.9	48.8	61.8	37.0	67.3	23.9	48.2	46.3	56.5	34.6	64.6	22.4	43.3	43.3	51.2	32.1	60.9	20.7		
	80	60.3	60.3	65.6	48.8	69.8	35.2	56.2	56.2	62.1	47.6	68.0	34.6	52.1	52.1	56.9	45.1	65.0	32.9	48.1	48.1	51.7	42.7	61.2	31.1		
	85	64.4	64.4	66.3	58.7	70.7	43.8	61.2	61.2	63.0	58.1	68.7	43.9	57.1	57.1	58.2	56.0	65.4	42.8	53.0	53.0	53.0	53.0	61.4	41.5		
	90	67.6	67.6	67.6	67.6	71.6	52.5	65.2	65.2	65.2	65.2	69.5	53.3	62.0	62.0	62.0	62.0	66.0	52.6	58.0	58.0	58.0	58.0	62.0	51.8		
2200	75	59.4	54.5	65.7	40.1	69.3	25.6	54.3	51.9	62.7	38.7	67.7	24.3	49.6	49.4	57.6	36.3	65.1	22.8	45.0	45.0	52.2	33.8	61.6	21.1		
	80	62.4	62.4	66.3	50.7	70.3	35.8	58.4	58.4	63.1	50.1	68.5	35.4	54.2	54.2	58.2	47.9	65.7	34.2	50.0	50.0	52.9	45.4	61.9	32.5		
	85	66.0	66.0	67.3	61.2	71.2	44.8	63.3	63.3	64.2	61.3	69.4	45.3	59.4	59.4	59.9	59.8	66.1	44.6	55.2	55.2	55.2	55.2	62.2	43.7		
	90	68.9	68.9	68.9	68.9	72.2	54.0	66.9	66.9	66.9	66.9	70.2	55.4	64.0	64.0	64.0	64.0	66.8	55.1	60.4	60.4	60.4	60.4	63.0	54.6		
2400	75	60.6	57.4	66.1	41.5	69.7	26.0	55.6	54.9	63.4	40.3	68.1	24.7	50.8	50.8	58.5	38.0	65.5	23.2	46.5	46.5	53.0	35.5	62.1	21.5		
	80	64.0	64.0	67.0	52.5	70.6	38.5	60.4	60.4	63.9	52.4	69.0	36.1	56.1	56.1	59.2	50.5	66.1	35.8	51.8	51.8	54.0	48.1	62.5	33.8		
	85	67.2	67.2	68.0	63.5	71.5	50.9	64.9	64.9	65.3	64.2	69.9	46.6	61.4	61.4	61.4	61.4	67.0	46.8	57.2	57.2	57.2	57.2	62.9	45.6		
	90	69.8	69.8	69.8	69.8	72.6	55.3	68.1	68.1	68.1	68.1	70.8	57.1	65.5	65.5	65.5	65.5	67.5	57.3	62.2	62.2	62.2	62.2	63.9	57.2		

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

Table PD-13 — Gross Cooling Capacities (MBH) 5 Ton Three Phase YHC060A3, A4, AW

CFM Airflow		Ambient Temperature (F)																								
		85						95						105						115						
		Enter. Dry Bulb	61		67		73		61		67		73		61		67		73		61		67		73	
			61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73						
		(F)	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
1800	75	56.6	49.0	64.4	37.5	67.7	24.7	52.0	46.8	60.9	35.7	66.2	23.3	47.0	44.2	55.9	33.3	63.6	21.8	42.3	41.7	50.0	30.7	59.8	20.0	
	80	58.5	58.5	64.6	47.0	68.6	34.7	54.7	54.7	61.2	45.5	66.8	33.3	50.6	50.6	56.3	43.2	64.1	31.7	46.4	46.4	50.5	40.5	60.0	29.8	
	85	62.9	62.9	65.3	56.4	69.4	42.2	59.6	59.6	61.9	55.5	67.7	42.3	55.6	55.6	57.3	53.2	64.3	41.1	51.2	51.2	51.9	50.7	60.3	39.5	
	90	66.2	66.2	66.4	65.6	70.3	50.3	63.7	63.7	63.7	63.7	68.4	51.2	60.3	60.3	60.3	60.3	64.9	50.3	56.4	56.4	56.3	56.3	60.8	49.1	
2000	75	58.3	52.5	65.0	39.1	68.1	25.1	53.6	50.0	62.0	37.6	66.6	23.8	48.6	47.7	57.2	35.4	64.2	22.3	43.8	43.8	51.2	32.7	60.6	20.5	
	80	61.1	61.1	65.6	49.2	69.0	34.6	57.3	57.3	62.4	48.4	67.5	34.8	53.2	53.2	57.8	46.2	64.7	33.2	48.7	48.7	52.0	43.6	60.9	31.4	
	85	64.9	64.9	66.4	59.2	69.9	43.1	62.1	62.1	63.4	59.1	67.8	43.0	58.4	58.4	59.2	57.5	64.9	43.9	54.0	54.0	54.0	54.0	61.2	42.0	
	90	67.7	67.7	67.7	67.7	70.8	51.7	65.7	65.7	65.7	65.7	68.6	52.2	62.8	62.8	62.8	62.8	65.9	52.9	59.0	59.0	59.0	59.0	61.9	52.3	
2200	75	59.9	55.8	65.8	40.7	68.4	25.5	55.2	53.4	62.9	39.5	67.0	24.2	50.0	50.0	58.3	37.3	64.6	22.7	45.6	45.6	52.4	34.7	61.2	21.0	
	80	63.1	63.1	66.3	51.0	69.3	35.2	59.7	59.7	63.5	51.0	67.9	35.1	55.5	55.5	59.0	49.2	65.4	34.5	50.8	50.8	53.4	46.6	61.6	32.9	
	85	66.4	66.4	67.2	61.6	70.2	43.9	64.0	64.0	64.6	62.4	68.8	44.9	60.6	60.6	60.6	60.6	66.0	45.1	56.4	56.4	56.4	56.4	62.0	44.2	
	90	68.7	68.7	68.7	68.7	71.2	52.8	67.1	67.1	67.1	67.1	69.7	54.9	64.5	64.5	64.5	64.5	66.9	55.8	61.0	61.0	61.0	61.0	62.9	55.3	
2400	75	61.2	59.0	66.2	41.7	68.6	25.9	56.3	56.3	63.6	41.3	67.3	24.6	51.9	51.9	59.2	39.0	65.0	23.1	47.2	47.2	53.4	36.6	61.7	21.4	
	80	64.5	64.5	67.0	53.1	69.6	35.6	61.6	61.6	64.2	53.3	68.2	35.7	57.5	57.5	60.1	52.1	65.8	35.5	52.8	52.8	54.7	49.6	62.1	34.3	
	85	67.3	67.3	68.1	64.0	70.5	44.7	65.4	65.4	65.6	65.2	69.1	46.0	62.4	62.4	62.3	62.3	66.6	46.8	58.4	58.4	58.4	58.4	62.6	46.2	
	90	69.4	69.4	69.5	69.5	71.5	53.9	68.1	68.1	68.1	68.1	70.1	56.3	65.7	65.7	65.7	65.7	67.6	58.0	62.5	62.5	62.5	62.5	63.7	57.9	

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity



# Performance Data

## (6 - 7½ Ton) High Efficiency

Table PD-14 — Gross Cooling Capacities (MBH) 6 Ton Three Phase YHC072A3,A4,AW

CFM Airflow		Ambient Temperature (F)																								
		85						95						105						115						
		Enter. Dry Bulb		61		67		73		61		67		73		61		67		73		61		67		73
		(F)	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
2160	75	67.3	56.6	73.6	42.5	74.5	27.6	61.6	53.5	71.8	41.9	75.1	26.6	55.8	50.4	66.8	38.7	74.1	25.3	49.8	47.2	59.9	36.3	71.3	23.5	
	80	68.7	68.2	73.8	51.7	75.4	37.0	63.6	63.6	72.0	52.1	76.0	38.1	58.9	58.9	66.9	49.7	74.7	36.4	54.1	54.1	60.2	46.5	71.5	34.5	
	85	72.2	72.2	74.5	61.4	76.2	44.5	69.2	69.2	72.5	62.8	76.8	46.1	64.6	64.6	67.8	60.9	75.0	46.2	59.5	59.5	61.3	57.7	71.7	45.4	
	90	74.7	74.7	75.3	70.6	77.0	51.9	73.4	73.4	73.7	73.2	77.7	55.1	70.1	70.1	70.1	70.1	75.6	56.1	65.4	65.4	65.4	65.4	72.1	55.8	
2400	75	69.0	60.1	74.0	43.3	74.5	27.9	63.5	57.2	72.7	43.1	75.2	27.0	57.5	54.0	68.4	40.9	74.5	25.7	51.8	51.0	61.5	37.6	72.0	24.0	
	80	70.7	70.7	74.3	52.9	75.4	37.2	66.8	66.8	73.0	54.6	76.2	37.8	61.9	61.9	68.7	53.0	75.1	37.4	56.7	56.7	61.9	49.8	72.4	36.1	
	85	73.8	73.8	75.0	63.0	76.2	44.9	71.9	71.9	73.8	66.0	77.1	47.0	67.9	67.9	69.7	65.4	75.5	47.5	62.7	62.7	63.6	62.4	72.6	47.7	
	90	75.6	75.6	75.9	72.4	77.0	52.5	75.2	75.2	75.1	75.1	78.0	56.3	72.8	72.8	72.7	72.7	76.4	58.2	68.8	68.8	68.8	68.8	73.2	59.0	
2640	75	70.3	63.2	74.2	43.9	74.6	28.3	65.2	60.8	73.2	44.5	75.4	27.4	59.2	57.7	69.6	42.9	74.7	26.2	53.2	53.2	62.9	39.8	72.5	24.6	
	80	72.3	72.3	74.5	53.9	75.4	37.4	69.5	69.5	73.8	56.7	76.3	38.2	64.6	64.6	70.0	56.1	75.6	38.5	59.2	59.2	63.5	53.0	73.0	37.7	
	85	74.7	74.7	75.3	64.3	76.2	45.2	73.7	73.7	74.7	68.7	77.3	47.6	70.5	70.5	71.3	69.3	76.1	48.9	65.6	65.6	65.6	65.6	73.4	49.7	
	90	76.1	76.1	76.2	73.6	76.9	53.0	76.2	76.2	76.2	76.2	78.1	57.2	74.5	74.5	74.5	74.5	76.9	59.9	71.2	71.2	71.2	71.2	74.1	61.7	
2880	75	71.3	65.8	74.3	44.4	74.6	28.7	66.8	64.4	73.7	45.6	75.5	27.8	60.5	60.5	70.6	44.8	74.9	26.6	55.1	55.1	64.1	41.8	72.9	25.0	
	80	73.3	73.3	74.7	54.8	75.4	37.6	71.4	71.4	74.4	58.5	76.4	38.5	67.0	67.0	71.0	58.9	75.9	39.1	61.4	61.4	64.9	56.2	73.3	38.6	
	85	75.1	75.1	75.5	65.3	76.2	45.6	74.8	74.8	75.4	70.8	77.4	48.2	72.4	72.4	72.4	72.4	76.4	49.9	68.2	68.2	68.1	68.1	74.0	51.5	
	90	76.3	76.3	76.3	74.5	76.9	53.5	76.9	76.9	76.9	76.9	78.2	58.0	75.7	75.7	75.7	75.7	77.2	61.3	72.9	72.9	72.9	72.9	74.8	64.1	

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

Table PD-15 — Gross Cooling Capacities (MBH) 7½ Ton Dual Compressors Three Phase YHC092A3,A4,AW

CFM Airflow		Ambient Temperature (F)																									
		85						95						105						115							
		Enter. Dry Bulb		61		67		73		61		67		73		61		67		73		61		67		73	
		(F)	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	
2700	75	85.7	72.4	95.8	56.8	99.9	37.1	79.3	69.3	92.0	53.7	98.8	35.8	72.8	66.0	85.9	50.8	96.1	34.2	66.1	62.6	78.5	49.1	91.8	32.2		
	80	87.5	87.0	96.2	68.5	101.1	50.4	81.8	81.8	92.4	67.4	99.6	50.2	76.6	76.6	86.2	64.6	96.7	48.0	71.1	71.1	79.0	61.4	92.0	45.8		
	85	92.8	92.8	97.0	81.6	102.3	61.3	88.5	88.5	93.1	81.1	100.3	61.3	83.4	83.4	87.1	78.6	97.0	60.9	77.9	77.9	80.3	75.4	92.3	59.4		
	90	97.2	97.2	98.3	94.2	103.5	72.4	94.3	94.3	94.3	94.3	101.1	73.1	90.0	90.0	90.0	90.0	97.8	73.7	84.9	84.9	84.9	84.9	92.9	72.7		
3000	75	87.9	77.0	96.6	57.3	100.4	37.6	81.5	73.7	93.5	56.1	99.4	36.4	74.9	70.5	87.8	53.4	96.9	34.8	67.4	67.4	80.5	50.2	92.8	32.8		
	80	90.5	90.5	97.4	71.2	101.6	51.1	85.6	85.6	94.0	71.0	100.4	50.9	80.2	80.2	88.2	68.7	97.3	49.8	74.5	74.5	81.0	65.5	93.2	47.9		
	85	95.6	95.6	98.4	85.1	102.9	62.5	92.2	92.2	95.0	85.8	101.3	63.3	87.3	87.3	89.5	84.1	98.1	63.3	81.8	81.8	82.9	81.2	93.6	62.5		
	90	99.4	99.4	99.9	98.1	104.1	74.1	97.2	97.2	97.2	97.2	102.1	75.5	93.6	93.6	93.5	93.5	99.1	77.0	88.8	88.8	88.7	88.7	94.4	76.9		
3300	75	89.8	81.3	97.5	59.0	100.7	38.1	83.6	78.2	94.6	58.3	99.8	37.1	77.0	75.0	89.2	55.9	97.5	35.4	70.0	70.0	82.1	52.8	93.6	33.4		
	80	93.2	93.2	98.3	73.5	102.0	51.7	88.9	88.9	95.2	74.2	101.0	52.0	83.4	83.4	89.8	72.6	97.9	50.6	77.6	77.6	82.8	69.5	94.1	49.9		
	85	97.6	97.6	99.4	88.0	103.3	67.9	94.9	94.9	96.5	90.0	101.9	64.8	90.5	90.5	91.7	89.4	99.0	67.3	85.2	85.2	85.1	85.1	94.7	65.2		
	90	100.9	100.9	100.9	104.6	104.6	75.6	99.2	99.2	99.2	99.2	102.8	77.7	96.1	96.1	96.1	96.1	100.1	80.0	91.8	91.8	91.8	91.8	95.7	80.7		
3600	75	91.5	85.3	98.2	60.6	101.0	38.6	85.5	82.6	95.4	60.2	100.2	37.5	78.5	78.5	90.5	58.3	98.0	35.9	72.4	72.4	83.4	55.2	94.3	34.0		
	80	95.2	95.2	99.0	75.4	102.3	56.8	91.5	91.5	96.3	77.2	101.5	52.7	86.3	86.3	91.3	76.3	98.4	51.4	80.4	80.4	84.4	73.4	94.7	51.4		
	85	99.1	99.1	100.2	90.6	103.6	69.8	96.9	96.9	97.8	93.6	102.4	66.1	93.1	93.1	93.1	93.1	99.7	69.8	88.0	88.0	87.9	87.9	95.6	67.8		
	90	101.9	101.9	101.9	101.9	105.0	76.9	100.7	100.7	100.7	100.7	103.4	79.6	98.0	98.0	97.9	97.9	100.8	82.5	94.0	94.0	94.0	94.0	96.7	84.1		

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity



# Performance Data

## (8½ - 10 Ton) High Efficiency

Table PD-16 — Gross Cooling Capacities (MBH) 8½ Ton Three Phase YHC102A3,A4,AW

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter. Dry Bulb (F)	61		67		73		61		67		73		61		67		73		61		67		73	
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
3060	75	94.0	81.8	105.7	62.8	110.8	40.9	86.3	77.8	100.7	59.7	109.7	39.3	79.0	74.2	92.4	56.0	105.5	37.1	71.8	70.5	84.0	53.1	99.6	34.6
	80	96.9	96.9	106.2	77.6	112.0	56.0	90.6	90.6	101.1	75.9	110.1	55.4	84.5	84.5	92.9	72.2	106.1	53.2	78.3	78.3	84.7	68.5	99.8	50.6
	85	103.5	103.5	107.2	92.9	113.2	68.7	98.6	98.6	102.2	92.1	111.6	70.3	92.1	92.1	94.5	88.8	106.4	68.8	85.8	85.8	86.7	85.2	100.0	66.5
	90	108.4	108.4	109.0	107.7	114.4	81.6	105.0	105.0	105.0	105.0	112.6	84.9	99.9	99.9	99.9	99.9	107.3	83.9	93.5	93.5	93.5	93.5	100.8	82.6
3400	75	96.6	87.2	107.1	64.7	111.4	41.5	88.7	83.3	102.4	62.6	110.7	40.1	81.4	79.6	94.4	59.1	106.6	37.9	74.2	74.2	85.9	55.4	101.1	35.5
	80	100.9	100.9	107.7	81.0	112.7	56.9	94.9	94.9	103.0	80.4	111.7	57.5	88.3	88.3	95.2	77.1	107.3	55.7	81.8	81.8	86.8	73.4	101.4	53.1
	85	106.6	106.6	108.9	97.4	114.0	70.2	102.6	102.6	104.4	97.8	112.8	72.9	96.5	96.5	97.6	95.6	108.0	72.4	89.9	89.9	89.8	89.8	101.8	70.8
	90	110.8	110.8	110.8	115.3	115.3	83.8	108.1	108.1	108.1	108.1	114.0	88.5	103.8	103.8	103.8	103.8	108.9	88.3	97.8	97.8	97.8	97.8	102.8	87.9
3740	75	98.9	92.5	107.4	65.9	112.0	42.2	91.2	88.7	103.7	65.4	111.1	40.7	83.5	83.5	96.3	62.2	107.5	38.7	76.9	76.9	87.5	58.4	102.2	36.2
	80	103.7	103.7	108.8	84.0	113.3	57.7	98.7	98.7	104.5	84.5	112.4	58.7	91.7	91.7	97.3	81.9	108.3	57.6	85.0	85.0	88.8	78.2	102.6	55.5
	85	108.8	108.8	110.1	100.9	114.6	76.9	105.4	105.4	106.4	103.0	113.7	75.1	100.2	100.2	100.2	100.2	109.3	75.7	93.4	93.4	93.4	93.4	103.1	74.4
	90	112.3	112.3	112.1	112.1	115.9	85.7	110.4	110.4	110.4	110.4	114.9	91.4	106.5	106.5	106.5	106.5	110.2	92.3	101.3	101.3	101.3	101.3	104.4	92.7
4080	75	100.9	97.3	108.1	67.4	112.5	42.9	93.1	93.1	104.7	67.9	111.5	41.4	86.2	86.2	97.8	65.2	108.2	39.4	79.4	79.4	88.8	61.3	103.0	36.9
	80	105.9	105.9	109.5	86.2	113.8	58.4	101.6	101.6	105.8	88.2	112.8	59.6	94.9	94.9	99.1	86.5	109.2	59.6	87.9	87.9	90.6	82.8	103.5	57.8
	85	110.2	110.2	110.9	103.4	115.1	79.5	107.6	107.6	107.6	107.6	114.1	76.6	103.0	103.0	103.0	103.0	109.9	77.6	96.6	96.6	96.6	96.6	104.2	77.7
	90	112.9	112.9	112.9	112.9	116.5	87.5	112.2	112.2	112.2	112.2	115.4	93.4	108.6	108.6	108.6	108.6	111.3	95.9	103.9	103.9	103.9	103.9	105.8	97.0

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

Table PD-17 — Gross Cooling Capacities (MBH) 10 Ton Three Phase YHC120A3,A4,AW

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter. Dry Bulb (F)	61		67		73		61		67		73		61		67		73		61		67		73	
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
3600	75	107.0	94.4	117.4	75.0	123.4	46.0	98.7	90.1	114.7	68.8	121.9	44.4	88.5	88.5	107.2	65.3	118.6	42.2	82.3	78.8	97.8	61.1	113.6	39.6
	80	110.9	108.6	119.9	88.2	125.0	62.5	104.5	104.1	115.2	87.5	123.4	62.3	97.7	97.7	107.8	84.3	119.4	60.8	90.6	90.6	98.5	80.1	114.3	58.3
	85	117.6	117.6	120.9	105.0	126.6	76.7	113.1	113.1	116.5	105.8	124.9	78.1	106.9	106.9	107.0	107.0	120.9	78.1	99.9	99.9	100.0	100.0	114.8	76.5
	90	122.5	122.5	122.4	122.4	128.2	91.1	119.6	119.6	119.6	117.1	126.4	94.1	115.0	115.0	114.7	114.6	121.6	94.3	109.0	109.0	109.0	109.0	115.8	94.3
4000	75	109.8	100.5	119.4	71.9	122.5	46.5	99.7	99.7	116.1	71.5	121.7	45.0	92.5	92.5	110.1	69.1	119.4	43.0	85.6	83.4	100.9	65.0	114.6	40.5
	80	114.6	114.1	120.8	90.1	124.1	68.3	109.3	109.3	117.0	91.2	123.4	62.7	102.3	102.3	110.8	89.9	120.6	62.5	94.8	94.8	101.9	86.0	115.5	61.1
	85	120.5	120.5	122.3	107.9	125.9	76.4	117.0	117.0	118.6	110.2	125.0	78.8	111.6	111.6	111.8	111.8	122.1	80.4	104.7	104.7	105.8	102.6	116.3	79.7
	90	125.2	125.2	124.2	124.2	127.6	90.9	122.4	122.4	121.7	120.9	126.6	95.1	118.5	118.5	118.3	118.3	123.6	98.4	113.1	113.1	113.3	113.3	117.7	98.6
4400	75	112.3	106.1	121.2	74.8	124.6	47.6	103.6	103.6	117.1	75.5	123.0	46.0	96.7	93.9	111.2	72.2	120.0	43.7	88.6	88.0	102.0	68.2	115.3	41.2
	80	117.6	117.6	122.5	94.7	126.3	64.2	113.0	113.0	118.4	95.8	124.7	64.4	106.3	106.3	112.2	94.9	121.5	64.3	98.8	98.8	103.5	91.1	116.1	62.8
	85	122.4	122.4	124.3	113.8	128.0	79.6	119.6	119.6	119.6	119.6	126.4	81.8	115.1	115.1	115.5	111.7	122.7	83.0	109.1	109.1	108.8	107.4	117.2	83.2
	90	126.0	126.0	127.1	125.0	129.6	95.2	124.3	124.3	124.2	124.2	128.0	99.4	120.9	120.9	120.9	120.9	123.9	101.2	116.1	116.1	116.1	116.1	118.8	103.3
4800	75	113.4	113.4	121.8	76.2	125.0	48.4	107.6	104.0	118.5	77.0	123.5	46.9	99.6	98.2	112.7	75.4	120.5	44.8	91.6	91.6	103.7	71.6	115.9	41.9
	80	115.9	119.5	123.2	97.0	126.7	64.8	115.8	115.8	119.8	99.6	125.2	65.3	109.8	109.8	113.9	99.4	122.1	65.5	102.3	102.3	105.5	96.3	117.2	66.8
	85	124.3	124.3	125.2	116.6	128.4	80.7	121.5	121.5	121.5	121.5	126.9	83.3	117.5	117.5	117.6	115.4	123.7	85.6	111.8	111.8	111.8	111.8	118.5	86.4
	90	127.5	127.5	128.0	126.7	130.1	96.9	126.0	126.0	125.5	125.5	128.6	101.5	122.6	122.6	123.0	123.0	125.5	105.5	118.2	118.2	118.2	118.2	120.3	107.5

Notes:

1. All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

# Performance Data

## (3 - 5 Tons)

### Standard Efficiency

**Table PD-18 — Direct Drive Evaporator Fan Performance 3, 4, and 5 Ton YSC036A, YSC048A, YSC060A — Low and Medium Heat**

Tons	Unit Model No.	CFM	External Static Pressure (Inches of Water) & Motor Power (Bhp) <sup>1</sup>							
			Standard Motor				Oversized Motor <sup>2</sup>			
			High Speed		Low Speed		High Speed		Low Speed	
			ESP	BHP	ESP	BHP	ESP	BHP	ESP	BHP
3	YSC036A**L,M Horizontal Airflow	960	0.81	0.36	0.61	0.28	0.96	0.39	0.89	0.35
		1020	0.77	0.37	0.57	0.28	0.94	0.41	0.86	0.47
		1080	0.73	0.38	0.50	0.29	0.91	0.43	0.82	0.39
		1140	0.69	0.39	0.42	0.29	0.88	0.44	0.77	0.40
		1200	0.66	0.40	0.34	0.30	0.84	0.45	0.74	0.41
		1260	0.60	0.41	0.26	0.30	0.80	0.46	0.70	0.42
		1320	0.55	0.42	0.14	0.31	0.75	0.48	0.65	0.44
		1380	0.49	0.42	0.05	0.31	0.70	0.49	0.59	0.45
4	YSC048A**L,M Horizontal Airflow	1440	0.44	0.43	—	—	0.64	0.52	0.54	0.48
		1280	0.88	0.53	0.76	0.47	1.15	0.67	0.94	0.56
		1360	0.82	0.54	0.70	0.47	1.10	0.68	0.89	0.58
		1440	0.75	0.54	0.63	0.48	1.05	0.70	0.83	0.60
		1520	0.68	0.55	0.55	0.48	1.00	0.73	0.76	0.63
		1600	0.61	0.55	0.46	0.49	0.95	0.75	0.69	0.64
		1680	0.52	0.56	0.33	0.49	0.90	0.78	0.60	0.66
		1760	0.42	0.56	0.18	0.50	0.85	0.82	0.45	0.68
5	YSC060A**L,M <sup>3</sup> Horizontal Airflow	1840	0.32	0.57	0.08	0.50	0.78	0.83	0.30	0.70
		1920	0.22	0.57	—	—	0.70	0.85	0.20	0.73
		1600	0.85	0.78	0.77	0.64	1.15	0.90	1.00	0.85
		1700	0.80	0.82	0.63	0.65	1.10	0.94	0.90	0.89
		1800	0.75	0.85	0.51	0.65	1.00	0.98	0.80	0.91
		1900	0.65	0.88	0.41	0.65	0.93	1.02	0.70	0.94
		2000	0.55	0.90	0.25	0.66	0.85	1.05	0.60	0.95
		2100	0.45	0.93	0.09	0.66	0.75	1.10	0.45	0.96
3	YSC036A**L,M Downflow Airflow	2200	0.35	0.95	0.00	0.67	0.65	1.12	0.30	0.96
		2300	0.25	0.97	—	—	0.55	1.17	0.10	0.97
		2400	0.15	1.00	—	—	0.43	1.20	—	—
		960	0.81	0.36	0.61	0.28	0.96	0.39	0.89	0.35
		1020	0.77	0.37	0.57	0.28	0.94	0.41	0.86	0.47
		1080	0.73	0.38	0.50	0.29	0.91	0.43	0.82	0.39
		1140	0.69	0.39	0.42	0.29	0.88	0.44	0.77	0.40
		1200	0.66	0.40	0.34	0.30	0.84	0.45	0.74	0.41
4	YSC048A**L,M Downflow Airflow	1260	0.60	0.41	0.26	0.30	0.80	0.46	0.70	0.42
		1320	0.55	0.42	0.14	0.31	0.75	0.48	0.65	0.44
		1380	0.49	0.42	0.05	0.31	0.70	0.49	0.59	0.45
		1440	0.44	0.43	—	—	0.64	0.52	0.54	0.48
		1280	0.93	0.53	0.81	0.47	1.20	0.67	0.99	0.56
		1360	0.87	0.54	0.75	0.47	1.15	0.68	0.94	0.58
		1440	0.80	0.54	0.68	0.48	1.10	0.70	0.88	0.60
		1520	0.73	0.55	0.60	0.48	1.05	0.73	0.81	0.63
5	YSC060A**L,M <sup>3</sup> Downflow Airflow	1600	0.66	0.55	0.51	0.49	1.00	0.75	0.74	0.64
		1680	0.57	0.56	0.38	0.49	0.95	0.78	0.65	0.66
		1760	0.47	0.56	0.23	0.50	0.90	0.82	0.50	0.68
		1840	0.37	0.57	0.13	0.50	0.83	0.83	0.35	0.70
		1920	0.27	0.57	—	—	0.75	0.85	—	—
		1600	0.90	0.78	0.82	0.64	1.20	0.90	1.05	0.85
		1700	0.85	0.82	0.68	0.65	1.15	0.94	0.95	0.89
		1800	0.80	0.85	0.56	0.65	1.05	0.98	0.85	0.91
5	YSC060A**L,M <sup>3</sup> Downflow Airflow	1900	0.70	0.88	0.46	0.65	0.98	1.02	0.75	0.94
		2000	0.60	0.90	0.30	0.66	0.90	1.05	0.65	0.95
		2100	0.50	0.93	0.14	0.66	0.80	1.10	0.50	0.96
		2200	0.40	0.95	0.05	0.67	0.70	1.12	0.35	0.96
		2300	0.30	0.97	—	—	0.60	1.17	0.15	0.97
		2400	0.20	1.00	—	—	0.48	1.20	—	—

Fan motor heat (MBH) = 3.72 x Fan Bhp + .24.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Notes:

1. Data includes pressure drop due to wet coil and filters.

2. 5 ton oversized motor performance is with 12x11 FC Centrifugal blower wheel.

3. YSC060AK\* uses a 1.0 hp direct drive motor and 12x11 FC Centrifugal blower wheel. Refer to oversized motor column for the standard motor performance data.

# Performance Data (3 - 5 Tons) Standard Efficiency

**Table PD-19 — Direct Drive Evaporator Fan Performance 3, 4 and 5 Ton YSC036A, YSC048A, YSC060A — High Heat**

			External Static Pressure (Inches of Water) & Motor Power (Bhp) <sup>1</sup>							
Tons	Unit Model No.	CFM	Standard Motor				Oversized Motor <sup>2</sup>			
			High Speed		Low Speed		High Speed		Low Speed	
			ESP	BHP	ESP	BHP	ESP	BHP	ESP	BHP
3	YSC036A**H Horizontal Airflow	960	0.76	0.36	0.56	0.28	0.91	0.39	0.84	0.35
		1020	0.72	0.37	0.52	0.28	0.89	0.41	0.81	0.47
		1080	0.68	0.38	0.45	0.29	0.86	0.43	0.77	0.39
		1140	0.64	0.39	0.37	0.29	0.83	0.44	0.72	0.40
		1200	0.61	0.40	0.29	0.30	0.79	0.45	0.69	0.41
		1260	0.55	0.41	0.21	0.30	0.75	0.46	0.65	0.42
		1320	0.50	0.42	0.09	0.31	0.70	0.48	0.60	0.44
		1380	0.44	0.42	0.00	0.31	0.65	0.49	0.54	0.45
4	YSC048A**H Horizontal Airflow	1440	0.39	0.43	—	—	0.59	0.52	0.49	0.48
		1280	0.88	0.53	0.76	0.47	1.15	0.67	0.94	0.56
		1360	0.82	0.54	0.70	0.47	1.10	0.68	0.89	0.58
		1440	0.75	0.54	0.63	0.48	1.05	0.70	0.83	0.60
		1520	0.68	0.55	0.55	0.48	1.00	0.73	0.76	0.63
		1600	0.61	0.55	0.46	0.49	0.95	0.75	0.69	0.64
		1680	0.52	0.56	0.33	0.49	0.90	0.78	0.60	0.66
		1760	0.42	0.56	0.18	0.50	0.85	0.82	0.45	0.68
5	YSC060A**H <sup>3</sup> Horizontal Airflow	1840	0.32	0.57	0.08	0.50	0.78	0.83	0.30	0.70
		1920	0.22	0.57	—	—	0.70	0.85	0.20	0.73
		1600	0.85	0.78	0.77	0.64	1.15	0.90	1.00	0.85
		1700	0.80	0.82	0.63	0.65	1.10	0.94	0.90	0.89
		1800	0.75	0.85	0.51	0.65	1.00	0.98	0.80	0.91
		1900	0.65	0.88	0.41	0.65	0.93	1.02	0.70	0.94
		2000	0.55	0.90	0.25	0.66	0.85	1.05	0.60	0.95
		2100	0.45	0.93	0.09	0.66	0.75	1.10	0.45	0.96
3	YSC036A**H Downflow Airflow	2200	0.35	0.95	0.00	0.67	0.65	1.12	0.30	0.96
		2300	0.25	0.97	—	—	0.55	1.17	0.10	0.97
		2400	0.15	1.00	—	—	0.43	1.20	—	—
		960	0.76	0.36	0.56	0.28	0.91	0.39	0.84	0.35
		1020	0.72	0.37	0.52	0.28	0.89	0.41	0.81	0.47
		1080	0.68	0.38	0.45	0.29	0.86	0.43	0.77	0.39
		1140	0.64	0.39	0.37	0.29	0.83	0.44	0.72	0.40
		1200	0.61	0.40	0.29	0.30	0.79	0.45	0.69	0.41
4	YSC048A**H Downflow Airflow	1260	0.55	0.41	0.21	0.30	0.75	0.46	0.65	0.42
		1320	0.50	0.42	0.09	0.31	0.70	0.48	0.60	0.44
		1380	0.44	0.42	0.00	0.31	0.65	0.49	0.54	0.45
		1440	0.39	0.43	—	—	0.59	0.52	0.49	0.48
		1280	0.93	0.53	0.81	0.47	1.20	0.67	0.99	0.56
		1360	0.87	0.54	0.75	0.47	1.15	0.68	0.94	0.58
		1440	0.80	0.54	0.68	0.48	1.10	0.70	0.88	0.60
		1520	0.73	0.55	0.60	0.48	1.05	0.73	0.81	0.63
5	YSC060A**H <sup>3</sup> Downflow Airflow	1600	0.66	0.55	0.51	0.49	1.00	0.75	0.74	0.64
		1680	0.57	0.56	0.38	0.49	0.95	0.78	0.65	0.66
		1760	0.47	0.56	0.23	0.50	0.90	0.82	0.50	0.68
		1840	0.37	0.57	0.13	0.50	0.83	0.83	0.35	0.70
		1920	0.27	0.57	—	—	0.75	0.85	—	—
		1600	0.90	0.78	0.82	0.64	1.20	0.90	1.05	0.85
		1700	0.85	0.82	0.68	0.65	1.15	0.94	0.95	0.89
		1800	0.80	0.85	0.56	0.65	1.05	0.98	0.85	0.91
5	YSC060A**H <sup>3</sup> Downflow Airflow	1900	0.70	0.88	0.46	0.65	0.98	1.02	0.75	0.94
		2000	0.60	0.90	0.30	0.66	0.90	1.05	0.65	0.95
		2100	0.50	0.93	0.14	0.66	0.80	1.10	0.50	0.96
		2200	0.40	0.95	0.00	0.67	0.70	1.12	0.35	0.96
		2300	0.30	0.97	—	—	0.60	1.17	0.15	0.97
		2400	0.20	1.00	—	—	0.48	1.20	—	—

Fan motor heat (MBH) = 3.72 x Fan Bhp + .24.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Notes:

1. Data includes pressure drop due to wet coil and filters.

2. 5 ton oversized motor performance is with 12x11 FC Centrifugal blower wheel.

3. YSC060AK\* uses a 1.0 hp direct drive motor and 12x11 FC Centrifugal blower wheel. Refer to oversized motor column for the standard motor performance data.

# Performance Data (3 Ton) Standard Efficiency

**Table PD-20 — Belt Drive Evaporator Fan Performance — 3 Ton — YSC036A3,A4,AW\*L, M — Low and Medium Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)										1-HP Standard Motor & Drive										
960	—	—	570	0.14	634	0.18	690	0.22	741	0.27	791	0.31	836	0.36	879	0.41	922	0.46	961	0.52
1080	537	0.14	606	0.18	669	0.23	724	0.27	773	0.32	819	0.36	864	0.41	906	0.47	946	0.52	985	0.58
1200	581	0.18	645	0.22	705	0.27	759	0.33	807	0.38	851	0.42	894	0.48	935	0.53	973	0.59	1011	0.65
1320	627	0.23	686	0.28	742	0.33	795	0.39	842	0.44	885	0.50	927	0.55	966	0.61	1003	0.67	1040	0.73
1440	673	0.29	728	0.34	780	0.39	831	0.45	878	0.52	921	0.58	960	0.64	998	0.69	1034	0.76	1070	0.82

**Table PD-20 — Continued**

External Static Pressure (Inches of Water)										
	1.10		1.20		1.30		1.40		1.50	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1000	0.57	1037	0.63	1072	0.69	1106	0.75	1139	0.81
1080	1022	0.64	1058	0.70	1093	0.76	1127	0.82	1161	0.89
1200	1047	0.71	1083	0.77	1117	0.83	1150	0.90	1183	0.97
1320	1075	0.79	1108	0.85	1141	0.92	1174	0.99	1206	1.06
1440	1104	0.88	1137	0.95	1170	1.02	1201	1.09	1231	1.16
1-HP Standard Motor & Field Supplied High Static Drive (2)										

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-21— Belt Drive Evaporator Fan Performance — 3 Ton — YSC036A3,A4,AW\*H — High Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
960	503	0.11	578	0.15	641	0.19	696	0.23	747	0.27	796	0.32	841	0.36	884	0.42	926	0.47	966	0.52
1080	548	0.15	616	0.19	678	0.23	731	0.28	780	0.32	826	0.37	870	0.42	912	0.47	952	0.53	991	0.59
1200	593	0.19	657	0.23	716	0.28	768	0.33	815	0.38	859	0.43	901	0.49	942	0.54	980	0.60	1017	0.66
1320	640	0.24	698	0.29	754	0.34	806	0.40	852	0.45	895	0.51	935	0.56	974	0.62	1012	0.68	1048	0.74
1440	688	0.31	742	0.35	794	0.41	844	0.47	890	0.53	931	0.59	970	0.65	1009	0.71	1045	0.77	1080	0.84

**Table PD-22 — Continued**

External Static Pressure (Inches of Water)										
	1.10		1.20		1.30		1.40		1.50	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1005	0.58	1041	0.64	1076	0.70	1110	0.76	1142	0.82
1080	1029	0.65	1064	0.71	1099	0.77	1133	0.83	1166	0.90
1200	1053	0.72	1089	0.78	1123	0.85	1156	0.91	1189	0.98
1320	1082	0.80	1116	0.87	1150	0.93	1182	1.00	1214	1.07
1440	1113	0.90	1146	0.97	1178	1.04	1209	1.11	1240	1.18
1-HP Standard Motor & Field Supplied High Static Drive (2)										

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data (3 Ton) Standard Efficiency

Table PD-22 — Belt Drive Evaporator Fan Performance — 3 Ton — YSC036A3,A4,AW\*L, M — Low and Medium Heat — Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)							1-HP Standard Motor & Drive													
960	552	0.13	631	0.17	699	0.22	759	0.27	811	0.33	858	0.38	902	0.44	943	0.49	980	0.54	1017	0.60
1080	598	0.17	675	0.22	739	0.27	798	0.33	850	0.38	898	0.44	941	0.50	982	0.57	1020	0.63	1056	0.69
1200	645	0.22	720	0.28	781	0.33	837	0.39	889	0.45	937	0.51	981	0.58	1021	0.65	1059	0.72	1095	0.79
1320	693	0.28	766	0.34	825	0.40	879	0.47	929	0.53	976	0.60	1020	0.67	1061	0.74	1099	0.81	1135	0.89
1440	743	0.35	811	0.42	871	0.49	922	0.55	970	0.62	1016	0.69	1059	0.77	1099	0.84	1138	0.92	1174	1.00

Table PD-22 — Continued

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1052	0.65	1086	0.71	1120	0.77	1152	0.83	1185	0.90
1080	1090	0.75	1123	0.81	1154	0.87	1185	0.93	1215	0.99
1200	1130	0.86	1162	0.92	1193	0.99	1224	1.05	1253	1.12
1320	1169	0.96	1203	1.04	1233	1.12	1263	1.19	1292	1.26
1440	1208	1.08	1241	1.16	1273	1.25	1303	1.33	1332	1.41
1-HP Standard Motor & Field Supplied High Static Drive (2)										

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Table PD-23 — Belt Drive Evaporator Fan Performance — 3 Ton — YSC036A3,A4,AW\*H — High Heat — Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)							1-HP Standard Motor & Drive													
960	563	0.13	639	0.18	707	0.23	766	0.28	817	0.33	864	0.39	908	0.44	947	0.49	985	0.55	1020	0.60
1080	611	0.18	685	0.23	748	0.28	806	0.34	858	0.39	905	0.45	947	0.51	988	0.58	1026	0.64	1061	0.70
1200	660	0.23	732	0.29	792	0.34	847	0.40	899	0.46	945	0.53	989	0.59	1029	0.66	1066	0.73	1102	0.80
1320	711	0.29	781	0.36	838	0.42	890	0.48	940	0.55	986	0.61	1029	0.68	1070	0.76	1106	0.83	1142	0.90
1440	762	0.37	829	0.44	885	0.51	935	0.57	983	0.64	1028	0.71	1070	0.79	1111	0.86	1148	0.94	1183	1.02

Table PD-23 — Continued

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive					1-HP Standard Motor & Field Supplied High Static Drive (2)					
960	1056	0.66	1090	0.71	1123	0.78	1156	0.84	1188	0.90
1080	1096	0.76	1128	0.82	1159	0.88	1190	0.94	1220	1.00
1200	1135	0.87	1168	0.93	1199	1.00	1229	1.07	1259	1.13
1320	1177	0.98	1209	1.06	1241	1.14	1270	1.21	1299	1.28
1440	1217	1.10	1250	1.18	1281	1.27	1311	1.35	1339	1.43

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (4 Ton) Standard Efficiency

**Table PD-24 — Belt Drive Evaporator Fan Performance — 4 Ton — YSC048A3,A4,AW\*L,M — Low and Medium Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)											1-HP Standard Motor & Drive									
1280	604	0.21	666	0.25	724	0.30	778	0.36	826	0.41	870	0.47	911	0.52	952	0.58	990	0.63	1026	0.69
1440	665	0.29	720	0.34	773	0.38	824	0.44	872	0.51	916	0.57	956	0.63	994	0.69	1030	0.75	1065	0.81
1600	726	0.38	777	0.44	826	0.49	873	0.54	919	0.61	961	0.68	1002	0.75	1039	0.82	1074	0.89	1109	0.95
1760	789	0.50	836	0.56	881	0.61	924	0.67	967	0.73	1008	0.81	1048	0.89	1085	0.97	1120	1.04	1154	1.12
1920	851	0.63	896	0.70	938	0.76	978	0.82	1018	0.88	1057	0.96	1095	1.04	1131	1.13	1167	1.21	1199	1.30

**Table PD-24 — Continued**

External Static Pressure (Inches of Water)										
	1.10		1.20		1.30		1.40		1.50	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1062	0.76	1097	0.82	1130	0.88	1163	0.95	1195	1.02
1440	1100	0.88	1133	0.94	1166	1.01	1198	1.08	1228	1.15
1600	1141	1.02	1173	1.09	1205	1.16	1235	1.23	1265	1.31
1760	1185	1.19	1215	1.26	1246	1.33	1275	1.41	1304	1.49
1920	1230	1.37	1260	1.45	—	—	—	—	—	—

**1-HP Standard Motor & Field Supplied High Static Drive (2)**

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-25 — Belt Drive Evaporator Fan Performance — 4 Ton — YSC048A3,A4,AW\*H — High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1280	618	0.22	678	0.26	735	0.31	788	0.37	835	0.42	879	0.48	920	0.53	960	0.59	997	0.65	1034	0.71
1440	680	0.30	735	0.35	787	0.40	838	0.46	884	0.52	926	0.59	966	0.64	1004	0.70	1040	0.77	1075	0.83
1600	744	0.40	794	0.45	842	0.50	888	0.56	933	0.64	975	0.71	1015	0.78	1051	0.84	1086	0.91	1120	0.97
1760	808	0.52	854	0.58	899	0.64	941	0.69	984	0.76	1024	0.84	1063	0.92	1099	1.00	1134	1.07	1167	1.14
1920	873	0.66	916	0.73	957	0.79	997	0.85	1037	0.92	1075	0.99	1112	1.08	1148	1.17	1183	1.25	1214	1.33

**Table PD-25 — Continued**

External Static Pressure (Inches of Water)										
	1.10		1.20		1.30		1.40		1.50	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1069	0.77	1104	0.83	1137	0.90	1169	0.96	1202	1.04
1440	1109	0.89	1142	0.96	1174	1.03	1205	1.10	1236	1.17
1600	1153	1.04	1184	1.11	1214	1.18	1244	1.26	1275	1.33
1760	1197	1.22	1228	1.29	1258	1.36	1287	1.44	—	—
1920	1245	1.41	1274	1.49	—	—	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive (2)										

**1-HP Standard Motor & Field Supplied High Static Drive (2)**

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

# (4 Ton) Standard Efficiency

Table PD-26 — Belt Drive Evaporator Fan Performance — 4 Ton — YSC048A3,A4,AW\*L, M — Low and Medium Heat — Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)							1-HP Standard Motor & Drive													
1280	669	0.25	744	0.31	805	0.37	860	0.44	911	0.50	959	0.56	1003	0.63	1045	0.70	1082	0.77	1119	0.85
1440	733	0.34	803	0.41	864	0.48	916	0.55	965	0.62	1011	0.69	1055	0.76	1096	0.83	1134	0.91	1171	0.99
1600	800	0.45	864	0.53	923	0.60	974	0.68	1021	0.75	1064	0.83	1106	0.91	1147	0.99	1185	1.07	1221	1.15
1760	868	0.58	926	0.67	982	0.75	1033	0.83	1079	0.92	1121	1.00	1161	1.08	1199	1.17	1237	1.26	1273	1.35
1920	937	0.74	989	0.83	1042	0.92	1092	1.01	1138	1.10	1179	1.19	1217	1.28	1254	1.38	1290	1.47	—	—

Table PD-26 — Continued

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1154	0.92	1187	1.00	1218	1.07	1248	1.14	1277	1.21
1440	1205	1.07	1237	1.15	1270	1.24	1300	1.32	1330	1.40
1600	1256	1.23	1290	1.33	1322	1.42	—	—	—	—
1760	1307	1.43	—	—	—	—	—	—	—	—
1920	—	—	—	—	—	—	—	—	—	—

## 1-HP Standard Motor & Field Supplied High Static Drive (2)

## 1-HP Standard Motor & Field Supplied High Static Drive (2)

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + 4024.

1. Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Table PD-27 — Belt Drive Evaporator Fan Performance — 4 Ton — YSC048A3,A4,AW\*H — High Heat — Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)							1-HP Standard Motor & Drive													
1280	686	0.27	758	0.33	817	0.39	871	0.45	922	0.51	968	0.58	1013	0.64	1053	0.72	1091	0.79	1127	0.86
1440	753	0.36	821	0.43	878	0.50	930	0.57	977	0.63	1022	0.70	1066	0.78	1107	0.85	1145	0.93	1180	1.01
1600	821	0.48	884	0.55	941	0.63	990	0.70	1035	0.78	1078	0.86	1120	0.93	1160	1.02	1197	1.10	1234	1.18
1760	891	0.62	949	0.70	1004	0.78	1052	0.87	1096	0.95	1137	1.03	1176	1.12	1214	1.20	1251	1.29	1287	1.38
1920	962	0.78	1015	0.87	1067	0.97	1115	1.06	1158	1.15	1198	1.24	1235	1.33	1271	1.42	—	—	—	—

Table PD-27 — Continued

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1160	0.94	1194	1.01	1224	1.08	1254	1.15	1283	1.22
1440	1214	1.09	1247	1.18	1278	1.26	1308	1.34	1338	1.43
1600	1268	1.26	1300	1.35	1331	1.44	—	—	—	—
1760	1321	1.47	—	—	—	—	—	—	—	—
1920	—	—	—	—	—	—	—	—	—	—

## 1-HP Standard Motor & Field Supplied High Static Drive (2)

## 1-HP Standard Motor & Field Supplied High Static Drive (2)

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + 4024.

1. Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

## (5 Ton) Standard Efficiency

**Table PD-28 — Belt Drive Evaporator Fan Performance — 5 Ton — YSC060A3,A4,AW \*L,M — Low and Medium Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1600	747	0.40	797	0.46	846	0.51	893	0.57	938	0.64	981	0.72	1020	0.79	1056	0.85	1091	0.92	1125	0.99
1800	828	0.56	873	0.62	917	0.68	960	0.74	1002	0.81	1042	0.89	1081	0.97	1118	1.05	1152	1.13	1185	1.20
2000	909	0.75	951	0.82	992	0.89	1031	0.95	1069	1.01	1107	1.09	1144	1.18	1179	1.27	1213	1.37	1246	1.45
2200	992	0.98	1031	1.06	1068	1.13	1104	1.20	1139	1.27	1175	1.35	1209	1.43	—	—	—	—	—	—
2400	1075	1.26	1111	1.34	1145	1.42	1179	1.50	—	—	—	—	—	—	—	—	—	—	—	—

**Table PD-28 — Continued**

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1158	1.05	1190	1.13	1221	1.20	1251	1.27	1281	1.35
1800	1216	1.28	1246	1.35	1276	1.43	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.

1. Field Supplied Fan Sheave AK56 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-29 — Belt Drive Evaporator Fan Performance — 5 Ton — YSC060A3,A4,AW \*H — High Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)							1-HP Standard Motor & Drive													
1600	764	0.42	814	0.47	862	0.53	909	0.60	953	0.67	994	0.74	1032	0.81	1069	0.88	1103	0.94	1136	1.01
1800	848	0.58	892	0.65	936	0.70	978	0.77	1020	0.84	1059	0.92	1098	1.01	1132	1.09	1166	1.16	1198	1.24
2000	932	0.79	973	0.86	1013	0.92	1051	0.98	1090	1.06	1127	1.14	1163	1.23	1197	1.32	1231	1.42	1262	1.50
2200	1017	1.03	1055	1.11	1091	1.18	1127	1.25	1162	1.32	1196	1.40	1231	1.49	—	—	—	—	—	—
2400	1103	1.32	1138	1.41	1171	1.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—

**Table PD-29 — Continued**

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1168	1.08	1201	1.15	1231	1.22	1261	1.30	1290	1.37
1800	1229	1.31	1259	1.39	1288	1.46	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.

1. Field Supplied Fan Sheave AK56 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

# (5 Ton) Standard Efficiency

**Table PD-30 — Belt Drive Evaporator Fan Performance — 5 Ton — YSC060A3,A4,AW\*L,M — Low and Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive																				
1600	825	0.48	889	0.56	946	0.64	996	0.71	1041	0.79	1084	0.87	1126	0.95	1166	1.03	1204	1.11	1240	1.20
1800	913	0.66	971	0.75	1025	0.84	1074	0.92	1117	1.01	1158	1.09	1197	1.18	1235	1.27	1272	1.36	1307	1.45
2000	1003	0.89	1054	0.98	1105	1.08	1153	1.18	1196	1.27	1235	1.37	1272	1.46	1308	1.50	—	—	—	—
2200	1094	1.16	1140	1.26	1187	1.37	1232	1.48	—	—	—	—	—	—	—	—	—	—	—	—
2400	1185	1.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

**1-HP Standard Motor & Field Supplied  
Low Static Drive (1)**

**Table PD-30 — Continued**

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1274	1.28	1307	1.37	1338	1.46	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.  
Notes:

Data includes pressure drop due to standard filters and wet coils.  
No accessories or options are included in pressure drop data.  
Refer to Table PD-89 to determine additional static pressure drop  
due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK56 required. Field Supplied Belt may be  
necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors,  
specifically designed and tested to operate reliably and continuously at all  
cataloged conditions. Using the full horsepower range of our fan motors as  
shown in our tabular data will not result in nuisance tripping or premature motor  
failure. Our product's warranty will not be affected.

**Table PD-31 — Belt Drive Evaporator Fan Performance — 5 Ton — YSC060A3,A4,AW \*H— High Heat — Horizontal Airflow**

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive																				
1600	847	0.51	910	0.59	964	0.66	1011	0.74	1056	0.82	1098	0.89	1140	0.97	1179	1.06	1217	1.14	1252	1.23
1800	938	0.70	995	0.79	1047	0.87	1093	0.96	1135	1.05	1175	1.13	1213	1.22	1251	1.31	1287	1.40	1323	1.49
2000	1030	0.94	1082	1.03	1131	1.13	1176	1.23	1217	1.32	1255	1.42	1292	1.50	—	—	—	—	—	—
2200	1123	1.23	1170	1.33	1216	1.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

**1-HP Standard Motor & Field Supplied  
Low Static Drive (1)**

**Table PD-31 — Continued**

CFM	External Static Pressure (Inches of Water)							
	1.10		1.20		1.30		1.40	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Drive</b>								
1600	1285	1.31	1317	1.40	1348	1.49	—	—
1800	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.  
Notes:

Data includes pressure drop due to standard filters and wet coils.  
No accessories or options are included in pressure drop data.  
Refer to Table PD-89 to determine additional static pressure drop  
due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

Factory supplied motors, in commercial equipment, are definite purpose  
motors, specifically designed and tested to operate reliably and continuously  
at all cataloged conditions. Using the full horsepower range of our fan motors  
as shown in our tabular data will not result in nuisance tripping or premature  
motor failure. Our product's warranty will not be affected.

# Performance Data

## (6 Ton) Standard Efficiency

**Table PD-32 — Belt Drive Evaporator Fan Performance — 6 Ton — YSC072A3,A4,AW \*L,M — Low and Medium Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Field Supplied Low Static Drive (1)</b>											<b>1-HP Standard Motor &amp; Drive</b>									
1920	—	—	—	—	583	0.35	638	0.42	687	0.49	732	0.56	777	0.64	817	0.71	857	0.80	895	0.88
2160	—	—	559	0.36	613	0.43	666	0.51	715	0.59	759	0.67	800	0.75	841	0.83	879	0.92	915	1.01
2400	—	—	597	0.46	647	0.54	695	0.62	743	0.71	788	0.80	828	0.88	866	0.97	902	1.06	938	1.15
2640	585	0.49	636	0.59	684	0.66	728	0.75	772	0.84	815	0.94	856	1.03	894	1.13	930	1.23	963	1.32
2880	629	0.63	677	0.73	722	0.81	763	0.89	803	0.99	844	1.09	884	1.20	923	1.31	958	1.41	990	1.51

**Table PD-32 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1 HP Standard Motor &amp; Drive</b>							<b>1HP Standard Motor &amp; High Static Drive Kit (or 2 HP Oversized Motor &amp; Drive)</b>													
1920	931	0.96	965	1.04	999	1.12	1030	1.20	1062	1.29	1092	1.37	1120	1.45	1150	1.54	1177	1.63	1204	1.71
2160	951	1.10	984	1.19	1018	1.29	1049	1.37	1080	1.46	1110	1.55	1139	1.65	1168	1.74	1196	1.84	1222	1.93
2400	973	1.25	1006	1.35	1039	1.45	1070	1.55	1100	1.65	1129	1.76	1158	1.86	1186	1.96	1213	2.06	1241	2.16
2540	996	1.42	1029	1.52	1060	1.63	1091	1.74	1121	1.85	1150	1.96	1178	2.07	1206	2.18	1233	2.30	—	—
2880	1023	1.62	1054	1.72	1085	1.83	1114	1.95	1143	2.06	1172	2.18	1200	2.30	—	—	—	—	—	—
<b>2 HP Oversized Motor &amp; Drive</b>																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+ .4024.

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP+ .5000

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-33 — Belt Drive Evaporator Fan Performance — 6 Ton — YSC072A3,A4,AW \*H— High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Field Supplied Low Static Drive (1)</b>											<b>1-HP Standard Motor &amp; Drive</b>									
1920	—	—	559	0.32	618	0.39	668	0.46	715	0.53	759	0.61	802	0.69	842	0.77	881	0.85	917	0.93
2160	—	—	600	0.42	654	0.49	705	0.57	749	0.65	791	0.73	831	0.81	870	0.90	907	0.99	943	1.08
2400	594	0.46	644	0.53	692	0.61	741	0.70	786	0.79	826	0.88	864	0.97	900	1.05	936	1.15	971	1.24
2640	643	0.60	691	0.67	734	0.76	778	0.85	822	0.95	862	1.05	899	1.14	935	1.24	967	1.33	1001	1.43
2880	693	0.76	737	0.84	778	0.93	818	1.03	858	1.13	898	1.24	935	1.35	970	1.45	1003	1.55	1034	1.66
																		<b>2-HP Oversized Motor &amp; Drive</b>		

**Table PD-33 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; High Static Drive Kit (or 2 HP oversized Motor &amp; Drive)</b>																				
1920	952	1.01	985	1.09	1019	1.17	1050	1.26	1080	1.34	1110	1.42	1139	1.51	1167	1.60	1192	1.68	1220	1.77
2160	977	1.17	1010	1.26	1043	1.36	1073	1.44	1103	1.53	1133	1.63	1161	1.72	1189	1.81	1216	1.91	1242	2.00
2400	1004	1.34	1037	1.44	1068	1.55	1099	1.65	1128	1.75	1156	1.85	1185	1.95	1212	2.05	1239	2.16	1265	2.26
2640	1033	1.54	1064	1.64	1095	1.75	1125	1.87	1153	1.97	1182	2.09	1210	2.20	—	—	—	—	—	—
2880	1065	1.76	1096	1.88	1124	1.99	1153	2.10	1182	2.22	—	—	—	—	—	—	—	—	—	—
<b>2-HP Oversized Motor &amp; Drive</b>																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+ .4024.

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP+ .5000

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (6 Ton) Standard Efficiency

**Table PD-34 — Belt Drive Evaporator Fan Performance — 6 Ton — YSC072AK \*L — Low Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)											2-HP Standard Motor & Drive									
1920	—	—	—	—	583	0.35	638	0.42	687	0.49	732	0.56	777	0.64	817	0.71	857	0.80	895	0.88
2160	—	—	559	0.36	613	0.43	666	0.51	715	0.59	759	0.67	800	0.75	841	0.83	879	0.92	915	1.01
2400	—	—	597	0.46	647	0.54	695	0.62	743	0.71	788	0.80	828	0.88	866	0.97	902	1.06	938	1.15
2640	585	0.49	636	0.59	684	0.66	728	0.75	772	0.84	815	0.94	856	1.03	894	1.13	930	1.23	963	1.32
2880	629	0.63	677	0.73	722	0.81	763	0.89	803	0.99	844	1.09	884	1.20	923	1.31	958	1.41	990	1.51

**Table PD-34 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2 HP Standard Motor & Drive						2 HP Standard Motor & High Static Drive)														
1920	931	0.96	965	1.04	999	1.12	1030	1.20	1062	1.29	1092	1.37	1120	1.45	1150	1.54	1177	1.63	1204	1.71
2160	951	1.10	984	1.19	1018	1.29	1049	1.37	1080	1.46	1110	1.55	1139	1.65	1168	1.74	1196	1.84	1222	1.93
2400	973	1.25	1006	1.35	1039	1.45	1070	1.55	1100	1.65	1129	1.76	1158	1.86	1186	1.96	1213	2.06	1241	2.16
2640	996	1.42	1029	1.52	1060	1.63	1091	1.74	1121	1.85	1150	1.96	1178	2.07	1206	2.18	1233	2.30	—	—
2880	1023	1.62	1054	1.72	1085	1.83	1114	1.95	1143	2.06	1172	2.18	1200	2.30	—	—	—	—	—	—
2 HP Standard Motor & High Static Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop

due to other options/accessories

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP + 5000

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-35 — Belt Drive Evaporator Fan Performance — 6 Ton — YSC072AK \*H— High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2 HP Std. Motor & Field Supplied Low Static Drive										2 HP Standard Motor & Drive										
1920	—	—	559	0.32	618	0.39	668	0.46	715	0.53	759	0.61	802	0.69	842	0.77	881	0.85	917	0.93
2160	—	—	600	0.42	654	0.49	705	0.57	749	0.65	791	0.73	831	0.81	870	0.90	907	0.99	943	1.08
2400	594	0.46	644	0.53	692	0.61	741	0.70	786	0.79	826	0.88	864	0.97	900	1.05	936	1.15	971	1.24
2640	643	0.60	691	0.67	734	0.76	778	0.85	822	0.95	862	1.05	899	1.14	935	1.24	967	1.33	1001	1.43
2880	693	0.76	737	0.84	778	0.93	818	1.03	858	1.13	898	1.24	935	1.35	970	1.45	1003	1.55	1034	1.66
																		2 HP Standard Motor & High Static Drive		

**Table PD-35 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2 HP Standard Motor & Drive					2-HP Standard Motor & High Static Drive															
1920	952	1.01	985	1.09	1019	1.17	1050	1.26	1080	1.34	1110	1.42	1139	1.51	1167	1.60	1192	1.68	1220	1.77
2160	977	1.17	1010	1.26	1043	1.36	1073	1.44	1103	1.53	1133	1.63	1161	1.72	1189	1.81	1216	1.91	1242	2.00
2400	1004	1.34	1037	1.44	1068	1.55	1099	1.65	1128	1.75	1156	1.85	1185	1.95	1212	2.05	1239	2.16	1265	2.26
2640	1033	1.54	1064	1.64	1095	1.75	1125	1.87	1153	1.97	1182	2.09	1210	2.20	—	—	—	—	—	—
2880	1065	1.76	1096	1.88	1124	1.99	1153	2.10	1182	2.22	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop

due to other options/accessories

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP + 5000

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

## (6 Ton) Standard Efficiency

**Table PD-36 — Belt Drive Evaporator Fan Performance — 6 Ton — YSC072A3,A4,AW \*L,M — Low and Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1920	—	—	576	0.32	636	0.40	687	0.46	733	0.54	778	0.62	821	0.70	864	0.78	906	0.86	946	0.95
2160	575	0.37	619	0.43	674	0.50	726	0.59	770	0.66	812	0.74	852	0.82	890	0.92	930	1.01	968	1.10
2400	629	0.49	669	0.55	713	0.62	763	0.71	809	0.81	849	0.89	887	0.97	923	1.06	959	1.16	994	1.27
2640	684	0.63	721	0.71	757	0.78	802	0.86	846	0.96	888	1.07	925	1.16	959	1.25	993	1.34	1027	1.45
2880	740	0.80	774	0.89	807	0.97	843	1.05	885	1.14	925	1.26	964	1.38	998	1.48	2-HP Oversized Motor and Drive		1030	1.57
																			1062	1.67

**Table PD-36 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive			1-HP Standard Motor & High Static Drive Kit (or 2 HP Oversized Motor & Drive)																	
1920	985	1.04	1020	1.13	1057	1.22	1090	1.31	1123	1.41	1155	1.50	1185	1.60	1213	1.69	1241	1.79	1268	1.88
2160	1005	1.19	1040	1.29	1075	1.38	1110	1.48	1143	1.59	1176	1.69	1206	1.80	1235	1.90	1264	2.00	—	—
2400	1029	1.37	1063	1.47	1098	1.58	1130	1.68	1162	1.78	1194	1.89	1223	2.00	1254	2.11	—	—	—	—
2540	1058	1.56	1090	1.68	1121	1.79	1152	1.90	1184	2.01	1214	2.13	1244	2.24	—	—	—	—	—	—
2880	1093	1.78	1123	1.90	1152	2.02	1181	2.14	1211	2.27	—	—	—	—	—	—	—	—	—	—
2-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.  
Notes:  
Data includes pressure drop due to standard filters and wet coils.  
No accessories or options are included in pressure drop data.  
Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories  
F1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.  
2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP + .5000.

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.  
Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions.  
Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-37 — Belt Drive Evaporator Fan Performance — 6 Ton — YSC072A3,A4,AW \*H — High Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1920	551	0.30	613	0.37	668	0.44	715	0.51	761	0.58	804	0.67	847	0.75	890	0.83	930	0.92	969	1.00
2160	608	0.41	661	0.48	714	0.56	760	0.64	802	0.72	842	0.80	882	0.90	920	0.99	958	1.08	996	1.17
2400	667	0.55	710	0.62	760	0.71	806	0.80	847	0.88	885	0.96	921	1.06	957	1.16	992	1.27	1027	1.37
2640	726	0.72	762	0.79	809	0.87	853	0.98	894	1.09	930	1.17	965	1.26	998	1.36	1031	1.47	1063	1.58
2880	786	0.91	818	0.99	857	1.08	900	1.18	939	1.30	976	1.41	1009	1.51	1042	1.61	1073	1.71	1103	1.82
2-HP Oversized Motor & Drive																				

**Table PD-37 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & High Static Drive Kit (or 2 HP Oversized Motor & Drive)																				
1920	1007	1.09	1044	1.19	1078	1.28	1111	1.37	1142	1.46	1172	1.56	1203	1.65	1230	1.75	1257	1.84	—	—
2160	1032	1.26	1068	1.36	1102	1.46	1135	1.56	1167	1.66	1198	1.77	1229	1.88	1259	1.98	—	—	—	—
2400	1061	1.47	1095	1.57	1128	1.67	1161	1.78	1191	1.88	1223	2.00	1254	2.11	1282	2.23	—	—	—	—
2640	1095	1.70	1126	1.81	1157	1.92	1189	2.03	1219	2.15	1250	2.26	—	—	—	—	—	—	—	—
2880	1133	1.94	1162	2.06	1191	2.19	1221	2.30	—	—	—	—	—	—	—	—	—	—	—	—
2-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.  
Notes:  
Data includes pressure drop due to standard filters and wet coils.  
No accessories or options are included in pressure drop data.  
Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories  
1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.  
2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP + .5000  
1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

# (6 Ton) Standard Efficiency

**Table PD-38 — Belt Drive Evaporator Fan Performance — 6 Ton — YSC072AK \*L — Low Heat —Horizontal Airflow**

External Static Pressure (Inches of Water)																				
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2 HP Standard Motor & Low Static Drive									2 HP Standard Motor & Drive											
1920	522	0.27	576	0.32	636	0.40	687	0.46	733	0.54	778	0.62	821	0.70	864	0.78	906	0.86	946	0.95
2160	575	0.37	619	0.43	674	0.50	726	0.59	770	0.66	812	0.74	852	0.82	890	0.92	930	1.01	968	1.10
2400	629	0.49	669	0.55	713	0.62	763	0.71	809	0.81	849	0.89	887	0.97	923	1.06	959	1.16	994	1.27
2640	684	0.63	721	0.71	757	0.78	802	0.86	846	0.96	888	1.07	925	1.16	959	1.25	993	1.34	1027	1.45
2880	740	0.80	774	0.89	807	0.97	843	1.05	885	1.14	925	1.26	964	1.38	998	1.48	1030	1.57	1062	1.67

**Table PD-38 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2 HP Standard Motor & High Static Drive Kit																				
1920	985	1.04	1020	1.13	1057	1.22	1090	1.31	1123	1.41	1155	1.50	1185	1.60	1213	1.69	1241	1.79	1268	1.88
2160	1005	1.19	1040	1.29	1075	1.38	1110	1.48	1143	1.59	1176	1.69	1206	1.80	1235	1.90	1264	2.00	—	—
2400	1029	1.37	1063	1.47	1098	1.58	1130	1.68	1162	1.78	1194	1.89	1223	2.00	1254	2.11	—	—	—	—
2640	1058	1.56	1090	1.68	1121	1.79	1152	1.90	1184	2.01	1214	2.13	1244	2.24	—	—	—	—	—	—
2880	1093	1.78	1123	1.90	1152	2.02	1181	2.14	1211	2.27	—	—	—	—	—	—	—	—	—	—

**2 HP Standard Motor & Drive**

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP + .5000.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-39 — Belt Drive Evaporator Fan Performance — 6 Ton — YSC072AK\*H — High Heat —Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2 HP Standard Motor & Field Supplied Low Static Drive (1)									2 HP Standard Motor & Drive											
1920	551	0.30	613	0.37	668	0.44	715	0.51	761	0.58	804	0.67	847	0.75	890	0.83	930	0.92	969	1.00
2160	608	0.41	661	0.48	714	0.56	760	0.64	802	0.72	842	0.80	882	0.90	920	0.99	958	1.08	996	1.17
2400	667	0.55	710	0.62	760	0.71	806	0.80	847	0.88	885	0.96	921	1.06	957	1.16	992	1.27	1027	1.37
2640	726	0.72	762	0.79	809	0.87	853	0.98	894	1.09	930	1.17	965	1.26	998	1.36	1031	1.47	1063	1.58
2880	786	0.91	818	0.99	857	1.08	900	1.18	939	1.30	976	1.41	1009	1.51	1042	1.61	1073	1.71	1103	1.82
2 HP Standard Motor & High Static Drive																				

**Table PD-39 — Continued**

External Static Pressure (Inches of Water)																				
1.10			1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2 HP Standard Motor & High Static Drive																				
1920	1007	1.09	1044	1.19	1078	1.28	1111	1.37	1142	1.46	1172	1.56	1203	1.65	1230	1.75	1257	1.84	—	—
2160	1032	1.26	1068	1.36	1102	1.46	1135	1.56	1167	1.66	1198	1.77	1229	1.88	1259	1.98	—	—	—	—
2400	1061	1.47	1095	1.57	1128	1.67	1161	1.78	1191	1.88	1223	2.00	1254	2.11	1282	2.23	—	—	—	—
2640	1095	1.70	1126	1.81	1157	1.92	1189	2.03	1219	2.15	1250	2.26	—	—	—	—	—	—	—	—
2880	1133	1.94	1162	2.06	1191	2.19	1221	2.30	—	—	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP + .5000

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (7½ Ton) Standard Efficiency

**Table PD-40 — Belt Drive Evaporator Fan Performance — 7½ Ton — YSC090,092A3,A4,AW, AK \*L — Low Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)												2-HP Standard Motor & Drive								
2400	—	—	—	—	676	0.59	726	0.67	773	0.77	815	0.85	854	0.94	891	1.03	928	1.12	963	1.22
2700	—	—	682	0.68	727	0.76	770	0.85	814	0.95	856	1.06	895	1.16	931	1.25	965	1.35	998	1.45
3000	693	0.79	738	0.89	780	0.97	819	1.07	858	1.18	898	1.29	936	1.40	972	1.52	1006	1.63	1038	1.73
3300	753	1.03	795	1.14	834	1.23	871	1.33	906	1.45	942	1.56	978	1.69	1014	1.81	1048	1.94	1080	2.06
3600	814	1.31	853	1.44	890	1.55	925	1.65	958	1.76	991	1.88	1023	2.01	1057	2.14	1088	2.28	1121	2.41
3-HP Oversized Motor																				

**Table PD-40 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	2-HP Standard Motor & Drive							2-HP Standard Motor & High Static Drive Kit (or 3-HP Oversized Motor & Drive)												
2400	996	1.32	1028	1.42	1061	1.52	1092	1.63	1122	1.73	1151	1.83	1180	1.93	1207	2.03	1235	2.14	1261	2.24
2700	1031	1.56	1062	1.66	1093	1.78	1123	1.89	1153	2.00	1181	2.12	1209	2.23	1236	2.35	1262	2.47	1288	2.58
3000	1070	1.85	1099	1.95	1128	2.07	1158	2.19	1185	2.31	1213	2.43	1240	2.55	1267	2.68	1293	2.81	1319	2.94
3300	1110	2.18	1139	2.29	1167	2.42	1195	2.54	1222	2.66	1248	2.79	1274	2.92	1301	3.05	1325	3.18	1351	3.33
3600	1151	2.55	1181	2.68	1208	2.81	1236	2.95	1261	3.07	1287	3.21	1311	3.33	—	—	—	—	—	—
	3-HP Oversized Motor & Drive																			

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750.

1. Field Supplied Motor Sheave 1VL40L x 7/8 and Fan Sheave AK71 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-41 — Belt Drive Evaporator Fan Performance — 7½ Ton — YSC090,092A3,A4,AW \*M— Medium Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																					
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
2-HP Standard Motor & Field Supplied Low Static Drive (1)										2-HP Standard Motor & Drive											
2400	—	—	662	0.56	711	0.65	759	0.74	802	0.83	842	0.91	879	1.00	916	1.09	951	1.19	986	1.29	
2700	676	0.67	721	0.75	764	0.84	809	0.94	851	1.04	891	1.14	927	1.24	961	1.34	994	1.44	1027	1.54	
3000	741	0.89	783	0.98	822	1.08	861	1.19	901	1.30	939	1.41	975	1.52	1009	1.64	1041	1.74	1071	1.85	
3300	807	1.17	846	1.26	882	1.37	917	1.48	953	1.60	989	1.72	1024	1.85	1058	1.97	1089	2.09	1119	2.21	
3600	874	1.50	910	1.60	944	1.71	976	1.83	1008	1.95	1041	2.08	1074	2.22	1107	2.35	1138	2.49	1168	2.62	
																		3-HP Oversized Motor & Drive			

**Table PD-41 — Continued**

External Static Pressure (Inches of Water)																					
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00		
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
2-HP Standard Motor & Drive								2-HP Standard Motor & High Static Drive Kit (or 3-HP Oversized Motor & Drive)													
2400	1019	1.39	1051	1.49	1083	1.60	1113	1.70	1141	1.80	1171	1.90	1199	2.01	1225	2.10	1252	2.20	1278	2.31	
2700	1058	1.65	1089	1.76	1120	1.87	1149	1.99	1178	2.10	1205	2.21	1232	2.33	1259	2.45	1284	2.56	1310	2.68	
3000	1101	1.96	1131	2.08	1160	2.20	1187	2.31	1215	2.44	1243	2.57	1269	2.69	1295	2.82	1321	2.95	1346	3.08	
3300	1147	2.33	1176	2.45	1204	2.58	1230	2.70	1256	2.82	1282	2.96	1308	3.09	1333	3.23	1358	3.36	—	—	
3600	1196	2.75	1223	2.88	1250	3.02	1276	3.15	1301	3.28	1325	3.41	—	—	—	—	—	—	—	—	
3-HP Oversized Motor & Drive																					

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750.

1. Field Supplied Motor Sheave 1VL40L x 7/8 and Fan Sheave AK71 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (7½ Ton) Standard Efficiency

Table PD-42 — Belt Drive Evaporator Fan Performance — 7½ Ton — YSC090,092A3,A4,AW, AK \*H — High Heat — Downflow Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)											2-HP Standard Motor & Drive									
2400	—	—	697	0.62	745	0.71	790	0.80	830	0.89	869	0.98	906	1.07	941	1.16	976	1.26	1009	1.36
2700	717	0.74	760	0.83	804	0.93	847	1.03	887	1.13	922	1.23	958	1.33	991	1.43	1024	1.53	1055	1.64
3000	787	0.99	826	1.09	865	1.20	905	1.31	943	1.42	979	1.54	1012	1.64	1044	1.76	1075	1.87	1105	1.98
3300	858	1.30	894	1.41	929	1.52	965	1.64	1001	1.77	1036	1.89	1068	2.01	1099	2.13	1129	2.25	1157	2.37
3600	930	1.66	963	1.78	995	1.90	1028	2.03	1061	2.16	1093	2.30	3-HP Oversized Motor & Drive							
											2-HP Standard Motor & High Static Drive (or 3-HP Oversized Motor)									

Table PD-42 — Continued

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive						2-HP Standard Motor & High Static Drive Kit (or 3-HP Oversized Motor & Drive)														
2400	1042	1.46	1073	1.56	1104	1.67	1134	1.77	1163	1.87	1190	1.97	1218	2.08	1244	2.18	1271	2.28	1296	2.38
2700	1086	1.75	1117	1.86	1146	1.97	1174	2.09	1203	2.21	1230	2.32	1255	2.44	1282	2.55	1308	2.67	1333	2.78
3000	1134	2.09	1163	2.21	1191	2.33	1218	2.45	1245	2.58	1272	2.70	1298	2.83	1323	2.96	1348	3.09	1372	3.22
3300	1185	2.49	1212	2.61	1238	2.74	1265	2.87	1292	3.01	1316	3.13	1341	3.27	1366	3.41	—	—	—	—
3600	1239	2.96	1265	3.09	1290	3.22	1316	3.36	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

#### Notes

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750.

1. Field Supplied Motor Sheave 1VL40L x 7/8 and Fan Sheave AK71 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Table PD-43 — Belt Drive Evaporator Fan Performance — 7½ Ton — YSC090,092A3,A4,AW, AK \*L — Low Heat — Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)									2-HP Standard Motor & Drive											
2400	653	0.53	694	0.59	745	0.67	793	0.77	835	0.86	874	0.94	911	1.03	948	1.13	982	1.23	1017	1.34
2700	725	0.73	760	0.80	801	0.88	847	0.98	889	1.09	927	1.19	963	1.28	997	1.38	1030	1.48	1061	1.60
3000	798	0.98	830	1.06	862	1.15	902	1.24	943	1.35	981	1.48	1017	1.60	1050	1.70	1081	1.80	1111	1.90
3300	872	1.28	901	1.38	929	1.47	961	1.56	998	1.67	1036	1.80	1071	1.93	1104	2.07	1135	2.19	1164	2.30
3600	946	1.65	973	1.75	1000	1.85	1025	1.95	1057	2.06	1091	2.17	1125	2.31	1158	2.46	1189	2.61	1219	2.75
													3-HP Oversized Motor & Drive							
Table PD-13 Continued													2-HP Standard Motor & High Static Drive (or 3-HP Oversized Motor)							

Table PD-43 — Continued

External Static Pressure (Inches of Water)																				
1.10			1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive					2-HP Standard Motor & High Static Drive Kit (or 3-HP Oversized Motor & Drive)															
2400	1053	1.44	1087	1.55	1121	1.65	1153	1.76	1185	1.86	1217	1.98	1246	2.08	1277	2.20	1306	2.32	1334	2.44
2700	1093	1.71	1124	1.83	1156	1.95	1187	2.06	1218	2.18	1248	2.30	1277	2.42	1306	2.53	1333	2.65	1361	2.78
3000	1141	2.02	1170	2.15	1198	2.28	1227	2.41	1255	2.54	1283	2.67	1311	2.79	1339	2.93	1365	3.05	1391	3.18
3300	1192	2.41	1220	2.52	1247	2.65	1272	2.78	1299	2.92	1325	3.07	1350	3.21	1376	3.36	—	—	—	—
3600	1246	2.87	1272	2.99	1298	3.11	1323	3.24	1348	3.37	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

#### Notes

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750.

1. Field Supplied Motor Sheave 1VL40L x 7/8 and Fan Sheave AK71 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

## (7½ Ton) Standard Efficiency

**Table PD-44 — Belt Drive Evaporator Fan Performance — 7½ Ton — YSC090,092A3,A4,AW \*M — Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)									2-HP Standard Motor & Drive											
2400	680	0.57	729	0.65	778	0.74	823	0.84	862	0.92	900	1.00	936	1.10	972	1.20	1006	1.31	1041	1.41
2700	756	0.79	795	0.87	841	0.97	884	1.08	923	1.18	959	1.27	992	1.36	1025	1.47	1057	1.58	1089	1.70
3000	833	1.07	865	1.16	906	1.25	946	1.36	985	1.49	1020	1.61	1052	1.71	1083	1.81	1114	1.91	1143	2.03
3300	910	1.41	938	1.50	972	1.60	1010	1.70	1047	1.84	1081	1.97	1114	2.11	1144	2.22	1173	2.33	1200	2.44
3600	988	1.81	1014	1.91	1042	2.01	1076	2.12	1110	2.25	1143	2.39	1175	2.54	1205	2.69	1234	2.82	1260	2.94
3-HP Oversized Motor & Drive																				

**Table PD-44 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive					2-HP Standard Motor & High Static Drive Kit (or 3-HP Oversized Motor & Drive)															
2400	1076	1.51	1110	1.62	1143	1.72	1176	1.83	1206	1.94	1238	2.05	1267	2.16	1297	2.28	1325	2.40	1353	2.52
2700	1120	1.82	1152	1.93	1183	2.05	1214	2.17	1243	2.28	1273	2.40	1302	2.52	1330	2.64	1357	2.76	1385	2.89
3000	1172	2.15	1201	2.29	1229	2.42	1257	2.55	1285	2.68	1312	2.80	1340	2.93	1367	3.06	1395	3.19	1421	3.33
3300	1227	2.56	1255	2.69	1281	2.83	1307	2.97	1333	3.11	1359	3.26	1384	3.40	—	—	—	—	—	—
3600	1287	3.06	1312	3.18	1337	3.31	1361	3.45	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750.

1. Field Supplied Motor Sheave 1VL40L x 7/8 and Fan Sheave AK71 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-45 — Belt Drive Evaporator Fan Performance — 7½ Ton — YSC090,092A3,A4,AW, AK \*H — High Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)							2-HP Standard Motor & Drive													
2400	713	0.62	764	0.71	811	0.81	851	0.89	889	0.97	926	1.07	962	1.17	997	1.28	1031	1.38	1067	1.48
2700	790	0.86	837	0.96	880	1.07	919	1.17	955	1.26	989	1.36	1022	1.46	1054	1.57	1086	1.69	1117	1.80
3000	869	1.16	910	1.26	950	1.38	989	1.50	1023	1.62	1056	1.72	1086	1.82	1116	1.92	1146	2.04	1175	2.17
3300	949	1.53	985	1.63	1023	1.75	1058	1.88	1092	2.02	1124	2.15	1154	2.26	1182	2.37	1210	2.48	1237	2.60
3600	1029	1.97	1061	2.07	1096	2.19	1130	2.33	1162	2.48	1193	2.63	1222	2.77	1250	2.89	1276	3.01	1302	3.13
3-HP Oversized Motor & Drive																				

**Table PD-45 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive			2-HP Standard Motor & High Static Drive Kit (or 3-HP Oversized Motor & Drive)																	
2400	1101	1.59	1134	1.69	1166	1.80	1197	1.90	1229	2.02	1259	2.13	1287	2.25	1317	2.37	1344	2.48	1373	2.61
2700	1148	1.92	1180	2.04	1210	2.15	1241	2.27	1269	2.39	1299	2.51	1326	2.62	1354	2.74	1383	2.88	1409	3.00
3000	1204	2.30	1232	2.43	1260	2.56	1287	2.69	1316	2.82	1344	2.95	1370	3.07	1397	3.20	1423	3.34	—	—
3300	1264	2.74	1290	2.87	1316	3.02	1342	3.16	1367	3.30	1393	3.45	—	—	—	—	—	—	—	—
3600	1327	3.26	1352	3.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750.

1. Field Supplied Motor Sheave 1VL40L x 7/8 and Fan Sheave AK71 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (8½ Ton) Standard Efficiency

**Table PD-46 — Belt Drive Evaporator Fan Performance — 8½ Ton — YSC102A3,A4,AW, AK \*L,M — Low and Medium Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)														2-HP Standard Motor & Drive						
2720	—	—	—	—	608	0.59	649	0.70	689	0.82	728	0.94	764	1.06	798	1.19	829	1.33	859	1.46
3060	—	—	615	0.65	654	0.75	692	0.87	728	0.99	764	1.13	799	1.26	833	1.39	864	1.53	894	1.68
3400	625	0.72	665	0.83	702	0.95	736	1.06	770	1.19	804	1.34	836	1.49	868	1.63	899	1.78	928	1.93
3740	681	0.93	716	1.05	752	1.18	784	1.31	815	1.44	846	1.58	876	1.74	906	1.90	935	2.06	963	2.22
4080	737	1.19	769	1.31	802	1.45	833	1.60	862	1.73	891	1.87	919	2.03	947	2.20	974	2.37	1001	2.55

**Table PD-46 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive												3-HP Oversized Motor & Drive								
2720	888	1.61	916	1.76	943	1.91	970	2.07	996	2.22	1021	2.37	1046	2.53	1071	2.69	1096	2.86	1119	3.02
3060	922	1.82	949	1.98	976	2.14	1001	2.31	1026	2.47	1051	2.65	1074	2.81	1098	2.99	1120	3.16	1144	3.34
3400	957	2.08	984	2.24	1011	2.41	1035	2.58	1060	2.75	1083	2.93	1106	3.11	1128	3.29	—	—	—	—
3740	992	2.39	1018	2.55	1045	2.72	1070	2.90	1095	3.08	1117	3.25	1140	3.44	—	—	—	—	—	—
4080	1028	2.73	1053	2.90	1079	3.07	1104	3.26	1128	3.44	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP+.5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.4750.

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-47 — Belt Drive Evaporator Fan Performance — 8½ Ton — YSC102A3,A4,AW, AK \*H— High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)														2-HP Standard Motor & Drive						
2720	—	—	—	—	619	0.62	661	0.74	700	0.85	738	0.97	773	1.09	807	1.23	838	1.36	868	1.51
3060	586	0.58	629	0.68	667	0.79	705	0.91	741	1.04	776	1.17	810	1.30	843	1.44	874	1.58	904	1.72
3400	642	0.76	681	0.88	717	1.00	751	1.12	785	1.25	817	1.40	849	1.55	881	1.69	911	1.84	940	1.99
3740	698	0.99	735	1.12	769	1.25	800	1.37	831	1.51	862	1.66	892	1.82	920	1.98	950	2.14	977	2.30
4080	756	1.26	789	1.40	821	1.54	851	1.68	879	1.82	908	1.97	936	2.13	964	2.30	991	2.48	1017	2.66

**Table PD-47 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive											3-HP Oversized Motor & Drive									
2720	896	1.65	923	1.80	950	1.95	977	2.11	1003	2.26	1029	2.42	1053	2.57	1078	2.74	1102	2.90	1124	3.06
3060	932	1.88	959	2.04	985	2.20	1010	2.36	1034	2.53	1058	2.70	1082	2.87	1105	3.05	1129	3.22	1151	3.39
3400	969	2.15	996	2.31	1020	2.48	1045	2.65	1070	2.83	1093	3.00	1116	3.19	1138	3.37	—	—	—	—
3740	1005	2.47	1032	2.64	1058	2.81	1083	2.99	1106	3.16	1129	3.35	—	—	—	—	—	—	—	—
4080	1044	2.83	1069	3.01	1095	3.19	1119	3.37	—	—	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP+.5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.4750.

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

# (8½ Ton) Standard Efficiency

**Table PD-48 — Belt Drive Evaporator Fan Performance — 8½ Ton — YSC102A3,A4,AW, AK \*L,M — Low and Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)									2-HP Standard Motor & Drive											
2720	607	0.59	655	0.69	697	0.80	744	0.93	791	1.07	834	1.21	871	1.34	904	1.46	933	1.58	962	1.70
3060	672	0.81	715	0.92	755	1.04	792	1.16	834	1.31	876	1.47	917	1.63	953	1.78	985	1.93	1013	2.06
3400	739	1.09	776	1.20	814	1.34	849	1.47	882	1.61	920	1.77	958	1.94	996	2.12	1030	2.29	1063	2.47
3740	807	1.43	839	1.54	875	1.69	907	1.83	938	1.98	969	2.13	1003	2.30	1037	2.49	1072	2.69	1106	2.88
4080	875	1.83	903	1.95	935	2.10	968	2.26	997	2.42	1025	2.58	1053	2.74	1084	2.93	1116	3.13	1148	3.34
3-HP Oversized Motor & Drive																				

**Table PD-48 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive											3-HP Oversized Motor & Drive									
2720	988	1.81	1013	1.93	1037	2.05	1061	2.17	1084	2.28	1106	2.40	1128	2.52	1150	2.64	1172	2.76	1192	2.88
3060	1040	2.19	1065	2.33	1090	2.46	1113	2.59	1136	2.72	1158	2.86	1179	2.99	1199	3.12	1220	3.25	1239	3.38
3400	1091	2.62	1117	2.78	1141	2.92	1165	3.07	1188	3.22	1210	3.37								
3740	1137	3.07	1166	3.27	1193	3.44														
4080																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + 5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + 4750.

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-49 — Belt Drive Evaporator Fan Performance — 8½ Ton — YSC102A3,A4,AW, AK \*H— High Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied									2-HP Standard Motor & Drive											
Low Static Drive (1)																				
2720	625	0.63	671	0.73	713	0.84	762	0.98	807	1.12	849	1.26	883	1.38	915	1.50	944	1.62	971	1.74
3060	692	0.86	734	0.98	772	1.10	811	1.23	854	1.38	896	1.54	934	1.70	969	1.85	997	1.99	1026	2.12
3400	760	1.15	799	1.28	834	1.41	868	1.55	903	1.70	942	1.87	980	2.04	1016	2.22	1049	2.39	1079	2.56
3740	828	1.50	863	1.64	898	1.79	929	1.94	960	2.08	993	2.25	1027	2.44	1062	2.63	1096	2.82	1127	3.02
4080	898	1.92	929	2.07	962	2.23	992	2.39	1020	2.55	1048	2.71	1078	2.89	1110	3.09	1142	3.30	—	—
3-HP Oversized Motor & Drive																				

**Table PD-49 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive									3-HP Oversized Motor & Drive											
2720	998	1.86	1022	1.97	1046	2.09	1069	2.21	1092	2.33	1115	2.45	1136	2.56	1158	2.69	1179	2.80	1200	2.93
3060	1052	2.26	1077	2.39	1101	2.52	1124	2.66	1146	2.79	1167	2.92	1188	3.05	1209	3.18	1229	3.31	1249	3.45
3400	1106	2.71	1131	2.86	1155	3.01	1179	3.16	1202	3.31	1222	3.45								
3740	1157	3.21	1185	3.39																
4080																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + 5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + 4750.

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

# (10 Ton) Standard Efficiency

**Table PD-50 — Belt Drive Evaporator Fan Performance — 10 Ton — YSC120A3,A4,AW, AK \*L,M — Low and Medium Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Field Supplied																				
Low Static Drive (1)																				
3200	—	—	—	—	—	—	727	1.00	763	1.14	798	1.28	832	1.42	863	1.56	895	1.71	924	1.86
3600	—	—	717	1.03	751	1.15	784	1.28	816	1.42	848	1.57	879	1.73	910	1.89	940	2.05	968	2.20
4000	746	1.21	780	1.35	813	1.49	843	1.62	873	1.76	902	1.92	931	2.09	959	2.26	986	2.43	1014	2.61
4400	814	1.57	845	1.73	876	1.88	905	2.03	932	2.18	959	2.34	985	2.51	1012	2.69	1037	2.88	1063	3.07
4800	883	2.02	911	2.18	940	2.35	967	2.52	993	2.68	1018	2.84	1042	3.01	1067	3.20	1091	3.39	1115	3.59
3-HP Standard Motor & Drive																				

**Table PD-50 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Drive																				
3200	952	2.01	979	2.18	1004	2.34	1029	2.51	1053	2.68	1078	2.86	1101	3.04	1124	3.23	1146	3.41	1169	3.59
3600	996	2.37	1023	2.53	1049	2.71	1073	2.88	1097	3.07	1120	3.25	1142	3.43	1164	3.63	1186	3.83	1207	4.02
4000	1041	2.79	1067	2.96	1092	3.14	1117	3.33	1141	3.51	1164	3.70	1186	3.90	1208	4.10	1228	4.30	1249	4.51
4400	1088	3.26	1113	3.45	1137	3.64	1162	3.84	1185	4.04	1207	4.23	1229	4.43	1252	4.65	1273	4.85	1293	5.06
4800	1139	3.80	1161	4.00	1185	4.22	1208	4.43	1230	4.63	1253	4.85	1275	5.06	1295	5.27	1317	5.49	1337	5.71
5-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.475.

5-HP Fan Motor Heat (MBH) = 2.950 x Fan BHP+.470.

1. Field Supplied Motor Sheave 1VM50 x 7/8", Fan Sheave AK89 and Belt AX40 required.

Trane's factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-51— Belt Drive Evaporator Fan Performance — 10 Ton — YSC120A3,A4,AW, AK \*H— High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Field Supplied Low Static Drive (1)																				
3200	—	—	—	—	723	0.99	759	1.12	793	1.26	827	1.40	860	1.55	891	1.69	921	1.84	949	2.00
3600	721	1.04	755	1.17	787	1.29	820	1.44	851	1.59	882	1.75	913	1.90	942	2.06	971	2.22	999	2.39
4000	793	1.40	824	1.54	854	1.67	883	1.82	913	1.98	941	2.15	969	2.32	997	2.50	1024	2.67	1050	2.85
4400	866	1.83	895	1.98	923	2.13	949	2.28	976	2.45	1003	2.63	1029	2.81	1054	3.00	1079	3.20	1104	3.39
4800	939	2.34	967	2.51	992	2.67	1017	2.84	1042	3.01	1066	3.19	1090	3.38	1114	3.58	1138	3.79	1161	4.00
3-HP Standard Motor & Drive																5-HP Oversized Motor & Drive				

**Table PD-51 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Drive																				
3200	976	2.16	1001	2.32	1027	2.49	1051	2.66	1075	2.84	1098	3.02	1120	3.19	1143	3.38	1166	3.57	1189	3.75
3600	1025	2.55	1052	2.73	1076	2.90	1100	3.09	1122	3.27	1145	3.46	1167	3.66	1188	3.85	1210	4.05	1230	4.25
4000	1076	3.03	1101	3.20	1126	3.40	1149	3.58	1172	3.77	1194	3.97	1216	4.18	1236	4.38	1257	4.59	1277	4.80
4400	1129	3.58	1153	3.77	1176	3.97	1200	4.17	1222	4.37	1244	4.57	1266	4.78	1286	4.99	1307	5.21	1326	5.43
4800	1184	4.21	1207	4.42	1229	4.63	1252	4.84	1274	5.06	1295	5.27	1315	5.48	1336	5.70	—	—	—	—
5-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.475.

5-HP Fan Motor Heat (MBH) = 2.950 x Fan BHP+.470.

1. Field Supplied Motor Sheave 1VM50 x 7/8", Fan Sheave AK89 and Belt AX40 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

# (10 Ton) Standard Efficiency

**Table PD-52 — Belt Drive Evaporator Fan Performance — 10 Ton — YSC120A3,A4,AW, AK \*L,M — Low and Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Field Supplied Low Static Drive (1)											3-HP Standard Motor & Drive									
3200	—	—	761	1.10	798	1.22	834	1.35	875	1.51	916	1.68	955	1.85	991	2.01	1022	2.16	1050	2.31
3600	799	1.35	836	1.48	872	1.63	904	1.77	936	1.91	972	2.09	1009	2.28	1045	2.47	1079	2.66	1111	2.84
4000	881	1.81	913	1.96	947	2.12	977	2.28	1006	2.44	1035	2.60	1066	2.78	1100	2.99	1133	3.20	1165	3.41
4400	963	2.39	992	2.54	1023	2.71	1052	2.89	1079	3.06	1106	3.23	1132	3.41	1160	3.61	1189	3.82	1219	4.05
4800	1045	3.07	1072	3.23	1099	3.41	1127	3.61	1154	3.80	1179	3.98	1203	4.17	1227	4.36	1251	4.56	1278	4.80
5-HP Oversized Motor & Drive																				

**Table PD-52 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Drive												5-HP Oversized Motor & Drive								
3200	1077	2.45	1103	2.60	1126	2.73	1150	2.87	1171	3.01	1193	3.15	1214	3.29	1233	3.42	1253	3.56	1274	3.71
3600	1140	3.02	1165	3.18	1190	3.34	1214	3.51	1235	3.66	1257	3.82	1279	3.98	1298	4.13	1317	4.28	1338	4.45
4000	1196	3.62	1225	3.83	1252	4.03	1276	4.22	1299	4.40	1321	4.58	1342	4.76	1363	4.94	1383	5.11	1401	5.28
4400	1250	4.28	1280	4.52	1307	4.75	1334	4.98	1359	5.20	1384	5.43	1405	5.62	—	—	—	—	—	—
4800	1305	5.03	1334	5.28	1361	5.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .475.

5-HP Fan Motor Heat (MBH) = 2.950 x Fan BHP + .470.

1. Field Supplied Motor Sheave 1VM50 x 7/8", Fan Sheave AK89 and Belt AX40 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-53 — Belt Drive Evaporator Fan Performance — 10 Ton — YSC120A3,A4,AW, AK \*H— High Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Field Supplied Low Static Drive (1)									3-HP Standard Motor & Drive											
3200	768	1.12	805	1.25	842	1.38	884	1.54	924	1.71	962	1.88	998	2.04	1028	2.19	1055	2.34	1082	2.48
3600	856	1.56	888	1.70	921	1.84	955	2.00	992	2.19	1028	2.37	1063	2.57	1096	2.75	1126	2.93	1153	3.10
4000	943	2.10	973	2.26	1002	2.41	1031	2.58	1062	2.76	1096	2.96	1129	3.17	1161	3.38	1192	3.59	1222	3.81
4400	1031	2.76	1060	2.94	1086	3.11	1113	3.28	1139	3.45	1167	3.66	1198	3.89	1228	4.11	1257	4.34	1287	4.58
4800	1119	3.45	1146	3.74	1171	3.93	1195	4.11	1219	4.30	1243	4.50	1270	4.72	1297	4.96	1325	5.21	1353	5.46
5-HP Oversized Motor & Drive																				

**Table PD-53 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Drive										5-HP Oversized Motor & Drive										
3200	1107	2.62	1131	2.76	1154	2.90	1176	3.04	1197	3.17	1218	3.32	1238	3.46	1257	3.59	1276	3.73	1296	3.87
3600	1178	3.27	1202	3.42	1224	3.58	1247	3.74	1268	3.90	1288	4.05	1308	4.21	1328	4.37	1346	4.52	1366	4.69
4000	1249	4.01	1273	4.19	1296	4.38	1318	4.56	1339	4.73	1361	4.91	1380	5.08	1399	5.26	1418	5.44	—	—
4400	1315	4.81	1340	5.03	1366	5.26	1389	5.48	1410	5.67	—	—	—	—	—	—	—	—	—	—
4800	1379	5.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .475.

5-HP Fan Motor Heat (MBH) = 2.950 x Fan BHP + .470.

1. Field Supplied Motor Sheave 1VM50 x 7/8", Fan Sheave AK89 and Belt AX40 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

## (3 - 5 Tons) High Efficiency

**Table PD-54— Direct Drive Evaporator Fan Performance 3, 4 and 5 Ton YHC036A\*\*L,M, YHC048A\*\*L,M, YHC060A\*\*L,M  
— Low and Medium Heat**

Unit Tons    Model No.		External Static Pressure (Inches of Water) & Motor Power (Bhp) <sup>1</sup>								
		Standard Motor				Oversized Motor <sup>2</sup>				
		CFM	High Speed		Low Speed		High Speed		Low Speed	
			ESP	BHP	ESP	BHP	ESP	BHP	ESP	BHP
3	YHC036A**L,M Horizontal Airflow	960	0.74	0.36	0.56	0.28	0.89	0.38	0.82	0.35
		1020	0.69	0.37	0.49	0.28	0.85	0.39	0.77	0.36
		1080	0.65	0.38	0.44	0.29	0.82	0.41	0.74	0.38
		1140	0.61	0.39	0.37	0.29	0.77	0.43	0.69	0.40
		1200	0.55	0.40	0.29	0.30	0.74	0.44	0.65	0.41
		1260	0.51	0.41	0.19	0.30	0.70	0.45	0.61	0.42
		1320	0.46	0.42	0.10	0.31	0.67	0.47	0.57	0.44
		1380	0.41	0.43	0.00	0.31	0.64	0.48	0.52	0.45
	1440	0.34	0.44	—	—	0.57	0.51	0.45	0.48	
4	YHC048A**L,M Horizontal Airflow	1280	0.85	0.53	0.74	0.47	1.11	0.67	0.90	0.56
		1360	0.78	0.54	0.66	0.47	1.06	0.68	0.85	0.58
		1440	0.71	0.54	0.60	0.48	1.01	0.70	0.80	0.60
		1520	0.64	0.55	0.51	0.48	0.96	0.73	0.72	0.63
		1600	0.55	0.55	0.39	0.49	0.89	0.75	0.63	0.64
		1680	0.46	0.56	0.27	0.49	0.84	0.78	0.54	0.66
		1760	0.37	0.56	0.12	0.50	0.79	0.82	0.37	0.68
		1840	0.26	0.57	0.00	0.50	0.70	0.83	0.24	0.70
	1920	0.16	0.57	—	—	0.62	0.85	0.13	0.73	
5	YHC060A**L,M Horizontal Airflow	1600	0.99	0.78	0.89	0.64	1.32	0.90	1.18	0.85
		1700	0.92	0.80	0.76	0.65	1.24	0.94	1.08	0.89
		1800	0.87	0.85	0.65	0.65	1.16	0.98	0.97	0.91
		1900	0.77	0.88	0.56	0.65	1.15	1.02	0.87	0.94
		2000	0.69	0.90	0.40	0.66	0.98	1.05	0.76	0.95
		2100	0.59	0.93	0.25	0.66	0.89	1.10	0.63	0.96
		2200	0.46	0.94	0.10	0.67	0.78	1.12	0.42	0.96
		2300	0.37	0.95	—	—	0.68	1.17	0.18	0.97
	2400	0.26	0.97	—	—	0.55	1.20	—	—	
3	YHC036A**L,M Downflow Airflow	960	0.74	0.36	0.56	0.28	0.89	0.38	0.82	0.35
		1020	0.69	0.37	0.49	0.28	0.85	0.39	0.77	0.36
		1080	0.65	0.38	0.44	0.29	0.82	0.41	0.74	0.38
		1140	0.61	0.39	0.37	0.29	0.77	0.43	0.69	0.40
		1200	0.55	0.40	0.29	0.30	0.74	0.44	0.65	0.41
		1260	0.51	0.41	0.19	0.30	0.70	0.45	0.61	0.42
		1320	0.46	0.42	0.10	0.31	0.67	0.47	0.57	0.44
		1380	0.41	0.43	0.00	0.31	0.64	0.48	0.52	0.45
	1440	0.34	0.44	—	—	0.57	0.51	0.45	0.48	
4	YHC048A**L,M Downflow Airflow	1280	0.90	0.53	0.79	0.47	1.16	0.67	0.95	0.56
		1360	0.83	0.54	0.71	0.47	1.11	0.68	0.90	0.58
		1440	0.76	0.54	0.65	0.48	1.06	0.70	0.85	0.60
		1520	0.69	0.55	0.56	0.48	1.01	0.73	0.77	0.63
		1600	0.60	0.55	0.44	0.49	0.94	0.75	0.68	0.64
		1680	0.51	0.56	0.32	0.49	0.89	0.78	0.59	0.66
		1760	0.42	0.56	0.17	0.50	0.84	0.82	0.42	0.68
		1840	0.31	0.57	0.05	0.50	0.75	0.83	0.29	0.70
	1920	0.21	0.57	—	—	0.67	0.85	—	—	
5	YHC060A**L,M Downflow Airflow	1600	1.04	0.78	0.94	0.64	1.37	0.90	1.23	0.85
		1700	0.97	0.80	0.81	0.65	1.29	0.94	1.13	0.89
		1800	0.92	0.85	0.70	0.65	1.21	0.98	1.02	0.91
		1900	0.82	0.88	0.61	0.65	1.20	1.02	0.92	0.94
		2000	0.74	0.90	0.45	0.66	1.03	1.05	0.81	0.95
		2100	0.64	0.93	0.30	0.66	0.94	1.10	0.68	0.96
		2200	0.51	0.94	0.15	0.67	0.83	1.12	0.47	0.96
		2300	0.42	0.95	—	—	0.73	1.17	0.23	0.97
	2400	0.31	0.97	—	—	0.60	1.20	—	—	

Fan motor heat (MBH) = 3.72 x Fan Bhp + .24.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Notes:

1. Data includes pressure drop due to wet coil and filters.



# Performance Data

## (3 - 5 Tons) High Efficiency

**Table PD-55 — Direct Drive Evaporator Fan Performance 3, 4 and 5 Ton YHC036A\*\*H, YHC048A\*\*H, YHC060A\*\*H  
— High Heat**

Unit		CFM	External Static Pressure (Inches of Water) & Motor Power (Bhp) <sup>1</sup>							
			Standard Motor				Oversized Motor <sup>2</sup>			
			High Speed		Low Speed		High Speed		Low Speed	
Tons	Model No.		ESP	BHP	ESP	BHP	ESP	BHP	ESP	BHP
3	YHC036A**H Horizontal Airflow	960	0.74	0.36	0.56	0.28	0.89	0.38	0.82	0.35
		1020	0.69	0.37	0.49	0.28	0.85	0.39	0.77	0.36
		1080	0.65	0.38	0.44	0.29	0.82	0.41	0.74	0.38
		1140	0.61	0.39	0.37	0.29	0.77	0.43	0.69	0.40
		1200	0.55	0.40	0.29	0.30	0.74	0.44	0.65	0.41
		1260	0.51	0.41	0.19	0.30	0.70	0.45	0.61	0.42
		1320	0.46	0.42	0.10	0.31	0.67	0.47	0.57	0.44
		1380	0.41	0.43	0.00	0.31	0.64	0.48	0.52	0.45
		1440	0.34	0.44	—	—	0.57	0.51	0.45	0.48
4	YHC048A**H Horizontal Airflow	1280	0.85	0.53	0.74	0.47	1.11	0.67	0.90	0.56
		1360	0.78	0.54	0.66	0.47	1.06	0.68	0.85	0.58
		1440	0.71	0.54	0.60	0.48	1.01	0.70	0.80	0.60
		1520	0.64	0.55	0.51	0.48	0.96	0.73	0.72	0.63
		1600	0.55	0.55	0.39	0.49	0.89	0.75	0.63	0.64
		1680	0.46	0.56	0.27	0.49	0.84	0.78	0.54	0.66
		1760	0.37	0.56	0.12	0.50	0.79	0.82	0.37	0.68
		1840	0.26	0.57	0.00	0.50	0.70	0.83	0.24	0.70
		1920	0.16	0.57	—	—	0.62	0.85	0.13	0.73
5	YHC060A**H Horizontal Airflow	1600	0.94	0.78	0.84	0.64	1.27	0.90	1.13	0.85
		1700	0.87	0.80	0.71	0.65	1.19	0.94	1.03	0.89
		1800	0.82	0.85	0.60	0.65	1.11	0.98	0.92	0.91
		1900	0.72	0.88	0.51	0.65	1.10	1.02	0.82	0.94
		2000	0.64	0.90	0.35	0.66	0.93	1.05	0.71	0.95
		2100	0.54	0.93	0.20	0.66	0.84	1.10	0.58	0.96
		2200	0.41	0.94	0.05	0.67	0.73	1.12	0.37	0.96
		2300	0.32	0.95	—	—	0.63	1.17	0.13	0.97
		2400	0.21	0.97	—	—	0.50	1.20	—	—
3	YHC036A**H Downflow Airflow	960	0.74	0.36	0.56	0.28	0.89	0.38	0.82	0.35
		1020	0.69	0.37	0.49	0.28	0.85	0.39	0.77	0.36
		1080	0.65	0.38	0.44	0.29	0.82	0.41	0.74	0.38
		1140	0.61	0.39	0.37	0.29	0.77	0.43	0.69	0.40
		1200	0.55	0.40	0.29	0.30	0.74	0.44	0.65	0.41
		1260	0.51	0.41	0.19	0.30	0.70	0.45	0.61	0.42
		1320	0.46	0.42	0.10	0.31	0.67	0.47	0.57	0.44
		1380	0.41	0.43	0.00	0.31	0.64	0.48	0.52	0.45
		1440	0.34	0.44	—	—	0.57	0.51	—	—
4	YHC048A**H Downflow Airflow	1280	0.90	0.53	0.79	0.47	1.16	0.67	0.95	0.56
		1360	0.83	0.54	0.71	0.47	1.11	0.68	0.90	0.58
		1440	0.76	0.54	0.65	0.48	1.06	0.70	0.85	0.60
		1520	0.69	0.55	0.56	0.48	1.01	0.73	0.77	0.63
		1600	0.60	0.55	0.44	0.49	0.94	0.75	0.68	0.64
		1680	0.51	0.56	0.32	0.49	0.89	0.78	0.59	0.66
		1760	0.42	0.56	0.17	0.50	0.84	0.82	0.42	0.68
		1840	0.31	0.57	0.05	0.50	0.75	0.83	0.29	0.70
		1920	0.21	0.57	—	—	0.67	0.85	—	—
5	YHC060A**H Downflow Airflow	1600	0.99	0.78	0.89	0.64	1.32	0.90	1.18	0.85
		1700	0.92	0.80	0.76	0.65	1.24	0.94	1.08	0.89
		1800	0.87	0.85	0.65	0.65	1.16	0.98	0.97	0.91
		1900	0.77	0.88	0.56	0.65	1.15	1.02	0.87	0.94
		2000	0.69	0.90	0.40	0.66	0.98	1.05	0.76	0.95
		2100	0.59	0.93	0.25	0.66	0.89	1.10	0.63	0.96
		2200	0.46	0.94	0.10	0.67	0.78	1.12	0.42	0.96
		2300	0.37	0.95	0.00	0.68	0.68	1.17	0.18	0.97
		2400	0.26	0.97	—	—	0.55	1.20	—	—

Fan motor heat (MBH) = 3.72 x Fan Bhp + .24.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Notes:

1. Data includes pressure drop due to wet coil and filters.
2. 5 Ton oversized motor performance is with 12 x 11 FC Centrifugal blower fan.



# Performance Data

## (3 Ton) High Efficiency

**Table PD-56 — Evaporator Fan Performance — 3 Ton — YHC036A3,A4,AW\*L, M — Low and Medium Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)											1-HP Standard Motor & Drive									
960	—	—	570	0.14	634	0.18	690	0.22	741	0.27	791	0.31	836	0.36	879	0.41	922	0.46	961	0.52
1080	537	0.14	606	0.18	669	0.23	724	0.27	773	0.32	819	0.36	864	0.41	906	0.47	946	0.52	985	0.58
1200	581	0.18	645	0.22	705	0.27	759	0.33	807	0.38	851	0.42	894	0.48	935	0.53	973	0.59	1011	0.65
1320	627	0.23	686	0.28	742	0.33	795	0.39	842	0.44	885	0.50	927	0.55	966	0.61	1003	0.67	1040	0.73
1440	673	0.29	728	0.34	780	0.39	831	0.45	878	0.52	921	0.58	960	0.64	998	0.69	1034	0.76	1070	0.82

**Table PD-56 — Continued**

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	1-HP Standard Motor & Drive									
960	1000	0.57	1037	0.63	1072	0.69	1106	0.75	1139	0.81
1080	1022	0.64	1058	0.70	1093	0.76	1127	0.82	1161	0.89
1200	1047	0.71	1083	0.77	1117	0.83	1150	0.90	1183	0.97
1320	1075	0.79	1108	0.85	1141	0.92	1174	0.99	1206	1.06
1440	1104	0.88	1137	0.95	1170	1.02	1201	1.09	1231	1.16
1-HP Standard Motor & Field Supplied High Static Drive (2)										

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-57— Belt Drive Evaporator Fan Performance — 3 Ton — YHC036A3,A4,AW\*H — High Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
960	503	0.11	578	0.15	641	0.19	696	0.23	747	0.27	796	0.32	841	0.36	884	0.42	926	0.47	966	0.52
1080	548	0.15	616	0.19	678	0.23	731	0.28	780	0.32	826	0.37	870	0.42	912	0.47	952	0.53	991	0.59
1200	593	0.19	657	0.23	716	0.28	768	0.33	815	0.38	859	0.43	901	0.49	942	0.54	980	0.60	1017	0.66
1320	640	0.24	698	0.29	754	0.34	806	0.40	852	0.45	895	0.51	935	0.56	974	0.62	1012	0.68	1048	0.74
1440	688	0.31	742	0.35	794	0.41	844	0.47	890	0.53	931	0.59	970	0.65	1009	0.71	1045	0.77	1080	0.84

**Table PD-57— Continued**

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1005	0.58	1041	0.64	1076	0.70	1110	0.76	1142	0.82
1080	1029	0.65	1064	0.71	1099	0.77	1133	0.83	1166	0.90
1200	1053	0.72	1089	0.78	1123	0.85	1156	0.91	1189	0.98
1320	1082	0.80	1116	0.87	1150	0.93	1182	1.00	1214	1.07
1440	1113	0.90	1146	0.97	1178	1.04	1209	1.11	1240	1.18
1-HP Standard Motor & Field Supplied High Static Drive (2)										

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

## (3 Ton) High Efficiency

**Table PD-58 — Evaporator Fan Performance — 3 Ton — YHC036A3,A4,AW\*L, M — Low and Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)							1-HP Standard Motor & Drive													
960	552	0.13	631	0.17	699	0.22	759	0.27	811	0.33	858	0.38	902	0.44	943	0.49	980	0.54	1017	0.60
1080	598	0.17	675	0.22	739	0.27	798	0.33	850	0.38	898	0.44	941	0.50	982	0.57	1020	0.63	1056	0.69
1200	645	0.22	720	0.28	781	0.33	837	0.39	889	0.45	937	0.51	981	0.58	1021	0.65	1059	0.72	1095	0.79
1320	693	0.28	766	0.34	825	0.40	879	0.47	929	0.53	976	0.60	1020	0.67	1061	0.74	1099	0.81	1135	0.89
1440	743	0.35	811	0.42	871	0.49	922	0.55	970	0.62	1016	0.69	1059	0.77	1099	0.84	1138	0.92	1174	1.00

**Table PD-58 — Continued**

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1052	0.65	1086	0.71	1120	0.77	1152	0.83	1185	0.90
1080	1090	0.75	1123	0.81	1154	0.87	1185	0.93	1215	0.99
1200	1130	0.86	1162	0.92	1193	0.99	1224	1.05	1253	1.12
1320	1169	0.96	1203	1.04	1233	1.12	1263	1.19	1292	1.26
1440	1208	1.08	1241	1.16	1273	1.25	1303	1.33	1332	1.41
1-HP Standard Motor & Field Supplied High Static Drive (2)										

**1-HP Standard Motor & Field Supplied High Static Drive (2)**

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-59 — Belt Drive Evaporator Fan Performance — 3 Ton — YHC036A3,A4,AW\*H — High Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)							1-HP Standard Motor & Drive													
960	563	0.13	639	0.18	707	0.23	766	0.28	817	0.33	864	0.39	908	0.44	947	0.49	985	0.55	1020	0.60
1080	611	0.18	685	0.23	748	0.28	806	0.34	858	0.39	905	0.45	947	0.51	988	0.58	1026	0.64	1061	0.70
1200	660	0.23	732	0.29	792	0.34	847	0.40	899	0.46	945	0.53	989	0.59	1029	0.66	1066	0.73	1102	0.80
1320	711	0.29	781	0.36	838	0.42	890	0.48	940	0.55	986	0.61	1029	0.68	1070	0.76	1106	0.83	1142	0.90
1440	762	0.37	829	0.44	885	0.51	935	0.57	983	0.64	1028	0.71	1070	0.79	1111	0.86	1148	0.94	1183	1.02

**1-HP Standard Motor & Field Supplied High Static Drive (2)**

For Standard Evaporator Fan Speed (RPM), reference Table PD-85.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-88 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-59 — Continued**

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive					1-HP Standard Motor & Field Supplied High Static Drive (2)					
960	1056	0.66	1090	0.71	1123	0.78	1156	0.84	1188	0.90
1080	1096	0.76	1128	0.82	1159	0.88	1190	0.94	1220	1.00
1200	1135	0.87	1168	0.93	1199	1.00	1229	1.07	1259	1.13
1320	1177	0.98	1209	1.06	1241	1.14	1270	1.21	1299	1.28
1440	1217	1.10	1250	1.18	1281	1.27	1311	1.35	1339	1.43



# Performance Data

## (4 Ton) High Efficiency

**Table PD-60 — Belt Drive Evaporator Fan Performance — 4 Ton — YHC048A3,A4,AW\*L,M — Low and Medium Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1280	614	0.22	675	0.26	733	0.31	787	0.37	834	0.42	878	0.48	919	0.53	959	0.59	997	0.65	1034	0.71
1440	676	0.30	731	0.34	784	0.39	835	0.46	883	0.52	925	0.58	965	0.64	1003	0.70	1039	0.76	1075	0.83
1600	739	0.40	789	0.45	838	0.50	885	0.56	931	0.63	973	0.70	1012	0.77	1049	0.84	1085	0.91	1118	0.97
1760	803	0.51	850	0.57	894	0.63	938	0.69	981	0.76	1021	0.83	1061	0.92	1097	0.99	1131	1.07	1164	1.14
1920	867	0.65	911	0.72	952	0.78	993	0.84	1033	0.91	1071	0.99	1110	1.07	1145	1.16	1180	1.25	1213	1.33

**Table PD-60 — Continued**

External Static Pressure (Inches of Water)										
	1.10		1.20		1.30		1.40		1.50	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1069	0.77	1104	0.83	1138	0.90	1170	0.97	1203	1.04
1440	1109	0.89	1141	0.96	1175	1.03	1205	1.10	1236	1.17
1600	1151	1.04	1183	1.11	1215	1.19	1246	1.26	1275	1.33
1760	1197	1.21	1227	1.29	1258	1.36	1287	1.44	—	—
1920	1243	1.41	1274	1.49	—	—	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive (2)										

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.  
Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories due to other options/accessories.  
Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-61 — Belt Drive Evaporator Fan Performance — 4 Ton — YHC048A3,A4,AW\*H — High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1280	627	0.23	688	0.27	745	0.32	797	0.38	844	0.43	887	0.49	928	0.54	967	0.60	1006	0.66	1042	0.72
1440	691	0.31	746	0.36	798	0.41	848	0.47	894	0.54	936	0.60	975	0.66	1012	0.72	1049	0.78	1085	0.85
1600	756	0.41	806	0.47	854	0.52	901	0.58	945	0.66	987	0.73	1025	0.79	1061	0.86	1096	0.93	1129	1.00
1760	822	0.54	868	0.60	912	0.65	955	0.71	997	0.79	1038	0.87	1076	0.95	1111	1.02	1145	1.10	1178	1.17
1920	889	0.69	931	0.75	972	0.81	1012	0.88	1051	0.95	1090	1.03	1127	1.11	1162	1.20	1196	1.29	1228	1.37

**Table PD-61 — Continued**

External Static Pressure (Inches of Water)										
	1.10		1.20		1.30		1.40		1.50	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1077	0.78	1112	0.85	1145	0.91	1178	0.98	1210	1.05
1440	1118	0.91	1150	0.98	1183	1.05	1214	1.12	1244	1.19
1600	1162	1.06	1193	1.13	1225	1.21	1255	1.28	1285	1.36
1760	1208	1.24	1239	1.32	1268	1.39	1297	1.47	—	—
1920	1258	1.45	—	—	—	—	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive (2)										

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.

2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

## (4 Ton) High Efficiency

**Table PD-62 — Belt Drive Evaporator Fan Performance — 4 Ton — YHC048A3,A4,AW\*L,M — Low and Medium Heat — Horizontal Airflow**

CFM	External Static Pressure (Inches of Water)															
	.10		.20		.30		.40		.50		.60		.70		.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Field Supplied Low Static Drive (1)</b>							<b>1-HP Standard Motor &amp; Drive</b>									
1280	681	0.26	755	0.32	816	0.38	870	0.45	921	0.51	968	0.58	1013	0.65	1053	0.72
1440	748	0.36	817	0.43	876	0.49	927	0.56	976	0.63	1022	0.70	1065	0.78	1106	0.85
1600	816	0.47	879	0.55	937	0.62	987	0.70	1033	0.78	1076	0.85	1119	0.93	1158	1.01
1760	885	0.61	943	0.69	999	0.78	1049	0.86	1093	0.94	1135	1.03	1174	1.11	1213	1.20
1920	956	0.77	1009	0.86	1062	0.96	1110	1.05	1154	1.14	1195	1.23	1232	1.32	1269	1.41

**1-HP Standard Motor & Field Supplied High Static Drive (2)**

**Table PD-62 — Continued**

CFM	External Static Pressure (Inches of Water)							
	1.10		1.20		1.30		1.40	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Drive</b>					<b>1-HP Standard Motor &amp; Drive</b>			
1280	1162	0.94	1193	1.01	1225	1.09	1255	1.16
1440	1214	1.09	1247	1.18	1278	1.26	1309	1.35
1600	1268	1.27	1300	1.35	1332	1.45	—	—
1760	1320	1.47	—	—	—	—	—	—
1920	—	—	—	—	—	—	—	—

**1-HP Standard Motor & Field Supplied High Static Drive (2)**

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.
  2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.
- Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-63 — Belt Drive Evaporator Fan Performance — 4 Ton — YHC048A3,A4,AW\*H — High Heat — Horizontal Airflow**

CFM	External Static Pressure (Inches of Water)															
	.10		.20		.30		.40		.50		.60		.70		.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Field Supplied Low Static Drive (1)</b>							<b>1-HP Standard Motor &amp; Drive</b>									
1280	698	0.28	769	0.34	828	0.40	881	0.46	932	0.52	978	0.59	1021	0.66	1061	0.73
1440	767	0.37	834	0.44	890	0.51	941	0.58	988	0.65	1034	0.72	1077	0.80	1116	0.87
1600	837	0.50	899	0.57	955	0.65	1003	0.72	1048	0.80	1091	0.88	1132	0.96	1171	1.04
1760	908	0.64	966	0.73	1020	0.81	1067	0.89	1110	0.98	1151	1.06	1190	1.15	1228	1.23
1920	981	0.82	1035	0.91	1085	1.00	1133	1.09	1174	1.18	1213	1.27	1250	1.37	1286	1.46

**1-HP Standard Motor & Field Supplied High Static Drive (2)**

**Table PD-63 — Continued**

CFM	External Static Pressure (Inches of Water)							
	1.10		1.20		1.30		1.40	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Drive</b>					<b>1-HP Standard Motor &amp; Drive</b>			
1280	1169	0.96	1201	1.03	1231	1.10	1262	1.17
1440	1222	1.11	1256	1.20	1286	1.28	1317	1.37
1600	1278	1.29	1311	1.38	1342	1.48	—	—
1760	—	—	—	—	—	—	—	—
1920	—	—	—	—	—	—	—	—

**1-HP Standard Motor & Field Supplied High Static Drive (2)**

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.
  2. Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.
- Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (5 Ton) High Efficiency

**Table PD-64 — Belt Drive Evaporator Fan Performance — 5 Ton — YHC060A3,A4,AW\*L,M — Low and Medium Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1600	704	0.36	757	0.41	806	0.47	853	0.52	899	0.58	942	0.65	984	0.72	1021	0.79	1058	0.85	1092	0.92
1800	777	0.49	828	0.56	872	0.62	915	0.67	957	0.73	998	0.80	1038	0.88	1076	0.96	1112	1.04	1146	1.11
2000	851	0.66	900	0.73	942	0.80	981	0.87	1019	0.93	1057	0.99	1094	1.07	1130	1.15	1165	1.24	1199	1.33
2200	927	0.86	973	0.94	1012	1.02	1049	1.09	1084	1.17	1119	1.23	1153	1.30	1188	1.38	1220	1.46	—	—
2400	1003	1.10	1045	1.19	1084	1.28	1119	1.36	1152	1.44	—	—	—	—	—	—	—	—	—	—

**Table PD-64 — Continued**

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1125	0.98	1158	1.06	1190	1.13	1220	1.20	1250	1.27
1800	1178	1.19	1209	1.26	1239	1.33	1269	1.41	1296	1.48
2000	1232	1.42	1263	1.50	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.  
Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.

1. Field Supplied Fan Sheave AK56 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-65 — Belt Drive Evaporator Fan Performance — 5 Ton — YHC060A3,A4,AW\*H — High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1600	723	0.38	774	0.43	822	0.48	869	0.54	914	0.60	957	0.68	997	0.75	1035	0.81	1070	0.88	1104	0.94
1800	801	0.52	847	0.58	891	0.64	933	0.70	975	0.76	1015	0.83	1054	0.91	1091	0.99	1126	1.07	1160	1.15
2000	878	0.70	922	0.77	962	0.84	1001	0.90	1039	0.96	1076	1.03	1113	1.11	1149	1.20	1183	1.28	1217	1.38
2200	957	0.91	999	0.99	1036	1.07	1072	1.14	1107	1.21	1142	1.28	1176	1.35	1209	1.43	—	—	—	—
2400	1036	1.17	1076	1.26	1111	1.34	1144	1.42	1177	1.50	—	—	—	—	—	—	—	—	—	—

**Table PD-65 — Continued**

External Static Pressure (Inches of Water)										
CFM	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1137	1.01	1168	1.08	1199	1.15	1230	1.22	1260	1.29
1800	1191	1.22	1222	1.29	1252	1.37	1281	1.44	1310	1.50
1000	1248	1.46	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.  
Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.

1. Field Supplied Fan Sheave AK56 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

## (5 Ton) High Efficiency

**Table PD-66 — Belt Drive Evaporator Fan Performance — 5 Ton — YHC060A3,A4,AW\*L,M — Low and Medium Heat — Horizontal Airflow**

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Drive</b>																				
1600	775	0.42	837	0.50	898	0.57	952	0.65	1000	0.72	1044	0.79	1086	0.87	1127	0.95	1166	1.03	1203	1.11
1800	856	0.58	912	0.66	967	0.74	1020	0.83	1069	0.91	1112	1.00	1152	1.08	1189	1.16	1227	1.25	1263	1.34
2000	939	0.77	990	0.86	1040	0.96	1089	1.05	1136	1.14	1180	1.24	1219	1.33	1256	1.42	1292	1.50	—	—
2200	1023	1.01	1070	1.11	1115	1.21	1160	1.31	1205	1.41	—	—	—	—	—	—	—	—	—	—
2400	1108	1.29	1151	1.39	1193	1.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—

**1-HP Standard Motor &  
Field Supplied Low Static Drive (1)**

**Table PD-66 — Continued**

CFM	External Static Pressure (Inches of Water)							
	1.10		1.20		1.30		1.40	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Drive</b>								
1600	1239	1.19	1272	1.28	1304	1.37	1336	1.46
1800	1299	1.43	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK56 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-67 — Belt Drive Evaporator Fan Performance — 5 Ton — YHC060A3,A4,AW\*H — High Heat — Horizontal Airflow**

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Drive</b>																				
1600	796	0.45	858	0.52	917	0.60	969	0.67	1015	0.75	1059	0.82	1100	0.90	1141	0.98	1178	1.06	1216	1.14
1800	881	0.61	935	0.70	991	0.78	1042	0.87	1087	0.95	1129	1.03	1168	1.12	1206	1.20	1244	1.29	1279	1.38
2000	967	0.82	1016	0.91	1066	1.01	1115	1.10	1160	1.19	1201	1.28	1239	1.38	1275	1.47	—	—	—	—
2200	1054	1.07	1099	1.17	1144	1.27	1189	1.38	1233	1.48	—	—	—	—	—	—	—	—	—	—
2400	1141	1.37	1183	1.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

**1-HP Standard Motor &  
Field Supplied High Static Drive (1)**

**Table PD-67 — Continued**

CFM	External Static Pressure (Inches of Water)							
	1.10		1.20		1.30		1.40	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
<b>1-HP Standard Motor &amp; Drive</b>								
1600	1251	1.22	1283	1.31	1315	1.40	1345	1.49
1800	1313	1.47	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

1. Field Supplied Fan Sheave AK56 required. Field Supplied Belt may be necessary.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (6 Ton) High Efficiency

**Table PD-68— Belt Drive Evaporator Fan Performance — 6 Ton — YHC072A3,A4,AW\*L,M — Low and Medium Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)										1-HP Standard Motor & Drive										
1920	—	—	—	—	597	0.37	652	0.44	700	0.51	745	0.58	788	0.66	829	0.74	869	0.82	906	0.91
2160	—	—	575	0.38	629	0.46	683	0.54	730	0.62	774	0.70	815	0.78	854	0.86	893	0.95	929	1.04
2400	561	0.41	615	0.49	664	0.57	714	0.65	762	0.74	805	0.83	844	0.92	882	1.01	918	1.10	954	1.20
2640	606	0.53	657	0.62	703	0.70	747	0.79	792	0.88	835	0.98	875	1.08	912	1.18	947	1.27	980	1.37
2880	651	0.67	699	0.77	743	0.85	785	0.94	825	1.05	867	1.15	906	1.26	943	1.37	978	1.47	1010	1.58

**Table PD-68 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive					1-HP Standard Motor & High Static Drive Kit (or 2 HP Oversized Motor & Drive)															
1920	941	0.99	977	1.07	1009	1.15	1041	1.23	1073	1.32	1103	1.40	1132	1.49	1159	1.57	1187	1.66	1213	1.75
2160	964	1.13	997	1.23	1031	1.32	1061	1.41	1093	1.50	1123	1.60	1151	1.69	1179	1.78	1207	1.87	1234	1.97
2400	988	1.29	1020	1.39	1054	1.50	1085	1.60	1114	1.70	1143	1.80	1171	1.90	1200	2.01	1227	2.11	1254	2.21
2640	1014	1.47	1046	1.58	1077	1.69	1107	1.80	1138	1.91	1166	2.02	1193	2.13	1222	2.25	—	—	—	—
2880	1042	1.68	1073	1.79	1103	1.90	1132	2.02	1162	2.14	1190	2.26	—	—	—	—	—	—	—	—
2-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP+.5000

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-69 — Belt Drive Evaporator Fan Performance — 6 Ton — YHC072A3,A4,AW\*H — High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1920	—	—	574	0.34	631	0.41	681	0.48	727	0.55	771	0.63	814	0.71	853	0.79	892	0.87	928	0.95
2160	562	0.36	616	0.44	671	0.52	719	0.60	763	0.68	805	0.76	845	0.84	884	0.93	921	1.02	957	1.11
2400	612	0.48	662	0.56	711	0.65	759	0.74	802	0.83	842	0.91	879	1.00	916	1.09	951	1.19	986	1.29
2640	663	0.63	709	0.71	754	0.80	798	0.90	842	1.00	881	1.10	917	1.19	951	1.29	986	1.39	1018	1.49
2880	715	0.80	758	0.88	799	0.98	840	1.08	880	1.19	920	1.30	955	1.41	990	1.51	1022	1.62	1053	1.72
									2-HP Oversized Motor & Drive											

**Table PD-69 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive					1-HP Standard Motor & High Static Drive Kit (or 2 HP Oversized Motor & Drive)															
1920	963	1.04	997	1.12	1028	1.20	1061	1.28	1090	1.36	1119	1.45	1149	1.54	1177	1.63	1203	1.71	1229	1.80
2160	990	1.21	1023	1.30	1055	1.39	1086	1.48	1115	1.57	1144	1.66	1173	1.76	1200	1.85	1227	1.95	1253	2.04
2400	1019	1.39	1051	1.49	1083	1.60	1113	1.70	1141	1.80	1171	1.90	1199	2.01	1225	2.10	1252	2.20	—	—
2640	1050	1.59	1081	1.70	1111	1.81	1141	1.93	1170	2.04	1198	2.15	1226	2.27	—	—	—	—	—	—
2880	1084	1.83	1114	1.94	1143	2.06	1172	2.18	1199	2.30	—	—	—	—	—	—	—	—	—	—
2-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP+.5000

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (6 Ton) High Efficiency

**Table PD-70 — Belt Drive Evaporator Fan Performance — 6 Ton — YHC072A3,A4,AW\*L,M — Low and Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)									1-HP Standard Motor & Drive											
1920	—	—	591	0.34	649	0.42	699	0.48	745	0.56	789	0.64	834	0.72	877	0.81	918	0.89	957	0.97
2160	587	0.38	633	0.44	690	0.52	740	0.61	784	0.68	825	0.76	865	0.85	904	0.95	943	1.04	981	1.13
2400	643	0.51	682	0.58	732	0.65	781	0.75	825	0.84	864	0.92	902	1.01	938	1.11	974	1.21	1010	1.32
2640	700	0.66	736	0.74	775	0.81	822	0.90	866	1.01	906	1.11	942	1.20	976	1.29	1009	1.40	1042	1.51
2880	756	0.84	790	0.93	823	1.01	864	1.09	907	1.20	947	1.32	983	1.43	1017	1.53	1048	1.62	1080	1.73
									2-HP Oversized Motor & Drive											

**Table PD-70 — Continued**

External Static Pressure (Inches of Water)																							
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00				
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP			
1-HP Standard Motor & Drive			1-HP Standard Motor & High Static Drive Kit(or 2 HP Oversized Motor & Drive)																				
1920	996	1.06	1033	1.16	1067	1.25	1102	1.35	1134	1.44	1165	1.53	1195	1.63	1223	1.72	1251	1.82	1277	1.91			
2160	1018	1.23	1054	1.32	1090	1.42	1123	1.52	1156	1.63	1188	1.73	1218	1.84	1247	1.94	1276	2.05	1304	2.16			
2400	1044	1.42	1079	1.52	1112	1.62	1145	1.73	1177	1.83	1208	1.94	1240	2.06	1268	2.17	1298	2.29	—	—			
2640	1075	1.62	1107	1.74	1139	1.85	1170	1.96	1201	2.08	1232	2.19	—	—	—	—	2-HP Oversized Motor & Field Supplied High Static Drive (2)						
2880	1111	1.85	1140	1.97	1169	2.09	1200	2.22	—	—	—	—	—	—	—								
2-HP Oversized Motor & Drive																							

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.  
Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP + .5000

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

2. Field Supplied Fan Sheave AK54 and Belt AX30 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-71 — Belt Drive Evaporator Fan Performance — 6 Ton — YHC072A3,A4,AW\*H — High Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive (1)							1-HP Standard Motor & Drive													
1920	565	0.31	627	0.39	680	0.46	727	0.52	772	0.61	816	0.69	859	0.77	902	0.86	942	0.94	981	1.03
2160	621	0.43	677	0.50	729	0.59	774	0.66	816	0.74	856	0.83	895	0.93	934	1.02	973	1.11	1009	1.21
2400	680	0.57	729	0.65	778	0.74	823	0.84	862	0.92	900	1.00	936	1.10	972	1.20	1006	1.31	1041	1.41
2640	741	0.75	782	0.82	828	0.92	872	1.03	911	1.13	947	1.21	981	1.31	1014	1.41	1048	1.53	1079	1.64
2880	802	0.95	837	1.04	880	1.13	921	1.24	960	1.36	995	1.47	1028	1.56	1060	1.66	1091	1.77	1122	1.89
													2-HP Oversized Motor & Drive							

**1-HP Standard Motor & High Static Drive Kit (or 2-HP Oversized Motor)**

**Table PD-71 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & High Static Drive Kit (or 2 HP Oversized Motor & Drive)																				
1920	1018	1.12	1054	1.21	1089	1.31	1122	1.40	1154	1.50	1184	1.59	1212	1.69	1241	1.78	1268	1.88	1293	1.97
2160	1045	1.30	1081	1.40	1114	1.50	1149	1.61	1181	1.71	1211	1.81	1241	1.92	1270	2.03	1298	2.13	1324	2.24
2400	1076	1.51	1110	1.62	1143	1.72	1176	1.83	1206	1.94	1238	2.05	1267	2.16	1297	2.28	—	—	—	—
2640	1111	1.75	1144	1.87	1174	1.98	1205	2.09	1236	2.21	—	—	—	—	—	—	—	—	—	—
2880	1151	2.02	1180	2.14	1209	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2-HP Oversized Motor & Drive										2-HP Oversized Motor & Field Supplied High Static Drive (2)										

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

2-HP Fan Motor Heat (MBH) = 3.000 x Fan BHP + .5000

1. Field Supplied Fan Sheave AK84 and Belt AX34 required.

2. Field Supplied Fan Sheave AK54 and Belt AX30 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (7½ Ton) High Efficiency

**Table PD-72 — Belt Drive Evaporator Fan Performance — 7½-Ton — YHC092A3,A4,AW \*L,M — Low and Medium Heat —DownflowAirflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied																				
Low Static Drive (1)																				
2400	—	—	—	—	—	—	613	0.58	656	0.68	696	0.79	732	0.91	765	1.03	798	1.16	829	1.30
2700	—	—	—	—	605	0.58	647	0.69	687	0.81	726	0.93	762	1.05	796	1.18	828	1.32	857	1.45
3000	—	—	606	0.62	645	0.72	684	0.83	721	0.96	758	1.09	792	1.22	826	1.36	858	1.49	888	1.64
3300	609	0.66	650	0.77	688	0.89	723	1.00	758	1.13	792	1.27	825	1.41	857	1.56	888	1.70	918	1.85
3600	658	0.84	695	0.96	731	1.08	764	1.20	796	1.33	828	1.47	859	1.63	890	1.79	920	1.94	949	2.10
2-HP Standard Motor & Drive																				

**Table PD-72 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2400	858	1.43	888	1.57	917	1.71	945	1.85	971	1.99	998	2.14	1023	2.28	1048	2.44	1072	2.59	1095	2.75
2700	886	1.60	915	1.75	942	1.90	969	2.05	995	2.21	1020	2.36	1045	2.51	1069	2.67	1093	2.83	1117	3.00
3000	916	1.79	944	1.94	970	2.10	995	2.26	1020	2.43	1044	2.59	1069	2.76	1092	2.93	1116	3.10	1139	3.27
3300	947	2.01	974	2.16	1000	2.33	1026	2.50	1050	2.67	1073	2.84	1097	3.02	1119	3.20	1141	3.38	—	—
3600	976	2.25	1004	2.42	1030	2.58	1056	2.76	1080	2.94	1103	3.12	1126	3.30	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP+.5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.4750.

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-73 — Belt Drive Evaporator Fan Performance — 7½-Ton — YHC092A3,A4,AW \*H — High Heat —DownflowAirflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied																				
Low Static Drive (1)																				
2400	—	—	—	—	—	—	623	0.60	664	0.70	703	0.82	739	0.93	773	1.06	804	1.19	835	1.32
2700	—	—	—	—	617	0.61	658	0.73	698	0.84	736	0.96	771	1.08	804	1.21	835	1.35	865	1.49
3000	—	—	619	0.65	658	0.75	696	0.87	733	1.00	770	1.13	804	1.26	837	1.40	868	1.54	897	1.69
3300	625	0.70	666	0.82	702	0.93	737	1.05	771	1.19	805	1.33	838	1.47	870	1.62	900	1.76	929	1.91
3600	675	0.89	713	1.02	747	1.14	779	1.26	811	1.40	843	1.55	874	1.70	904	1.86	934	2.02	962	2.17
2-HP Standard Motor & Drive																				

**Table PD-73 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2400	864	1.46	895	1.60	923	1.74	951	1.88	977	2.02	1003	2.17	1028	2.32	1053	2.47	1078	2.63	1100	2.78
2700	894	1.64	921	1.79	948	1.94	974	2.09	1001	2.24	1027	2.40	1052	2.56	1076	2.72	1100	2.88	1124	3.05
3000	925	1.83	952	1.99	978	2.15	1004	2.32	1029	2.48	1052	2.65	1076	2.82	1100	2.99	1123	3.15	1146	3.33
3300	958	2.06	984	2.22	1010	2.39	1035	2.56	1059	2.73	1082	2.91	1105	3.09	1128	3.28	—	—	—	—
3600	990	2.33	1017	2.50	1043	2.66	1067	2.84	1091	3.02	1114	3.20	1137	3.39	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP+.5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.4750.

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

(7½ Ton)  
High Efficiency

**Table PD-74 — Belt Drive Evaporator Fan Performance — 7½-Ton — YHC092A3,A4,AW \*L,M — Low and Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)																				
2400	—	—	599	0.52	650	0.62	703	0.75	751	0.87	789	0.98	823	1.08	855	1.19	885	1.29	912	1.39
2700	604	0.58	651	0.68	694	0.79	741	0.91	789	1.06	832	1.19	868	1.32	900	1.44	931	1.56	959	1.68
3000	661	0.77	705	0.88	744	1.00	783	1.12	826	1.26	869	1.42	909	1.58	945	1.73	976	1.86	1004	1.99
3300	719	1.00	758	1.11	797	1.25	832	1.37	867	1.51	907	1.68	946	1.85	983	2.02	1017	2.18	1048	2.34
3600	779	1.28	813	1.39	850	1.54	883	1.68	915	1.82	948	1.97	984	2.15	1020	2.33	1055	2.52	1088	2.71
2-HP Standard Motor & Drive										3-HP Oversized Motor & Drive										

**Table PD-74 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2400	939	1.50	965	1.60	990	1.71	1014	1.81	1039	1.92	1063	2.03	1085	2.14	1108	2.25	1131	2.36	1154	2.49
2700	985	1.79	1010	1.91	1034	2.03	1058	2.14	1081	2.26	1104	2.38	1126	2.50	1148	2.62	1169	2.74	1190	2.86
3000	1031	2.12	1056	2.25	1081	2.39	1104	2.51	1127	2.65	1148	2.77	1169	2.90	1190	3.03	1210	3.16	1231	3.30
3300	1077	2.50	1102	2.64	1127	2.78	1151	2.93	1174	3.07	1194	3.21	1216	3.36	—	—	—	—	—	—
3600	1120	2.89	1146	3.06	1172	3.22	1195	3.38	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-75 — Belt Drive Evaporator Fan Performance — 7½-Ton — YHC092A3,A4,AW \*H — High Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)																				
2400	—	—	613	0.54	666	0.66	718	0.78	762	0.90	799	1.01	833	1.11	864	1.22	893	1.32	920	1.42
2700	621	0.61	667	0.72	710	0.83	759	0.97	804	1.10	846	1.24	880	1.36	911	1.48	941	1.60	968	1.72
3000	680	0.81	723	0.93	761	1.05	802	1.18	845	1.33	888	1.49	925	1.64	959	1.79	988	1.92	1016	2.05
3300	740	1.06	780	1.19	816	1.31	850	1.45	889	1.60	928	1.77	966	1.94	1002	2.11	1036	2.28	1063	2.42
3600	800	1.35	837	1.49	872	1.63	904	1.77	935	1.91	971	2.08	1007	2.27	1043	2.45	1077	2.64	1108	2.83
2-HP Standard Motor & Drive										3-HP Oversized Motor & Drive										

**Table PD-75 — Continued**

External Static Pressure (Inches of Water)																						
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
2-HP Standard Motor & Drive																						
2400	946	1.53	972	1.64	997	1.74	1022	1.84	1045	1.95	1069	2.06	1092	2.17	1115	2.28	1137	2.40	1160	2.52		
2700	994	1.84	1019	1.95	1043	2.07	1066	2.18	1089	2.30	1112	2.42	1134	2.54	1155	2.66	1177	2.78	1197	2.90		
3000	1043	2.18	1067	2.31	1091	2.44	1114	2.57	1137	2.70	1158	2.83	1178	2.96	1200	3.09	1220	3.22	1240	3.35		
3300	1090	2.57	1116	2.72	1140	2.86	1162	3.00	1185	3.15	1206	3.29	1227	3.43	—	—	—	—	—	—		
3600	137	3.00	1163	3.17	1188	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
3-HP Oversized Motor & Drive																						

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (8½ Ton) High Efficiency

**Table PD-76— Belt Drive Evaporator Fan Performance — 8½-Ton — YHC102A3,A4,AW \*L — Low Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)																				
2720	—	—	—	—	621	0.62	662	0.74	703	0.86	741	0.98	777	1.11	810	1.24	841	1.38	871	1.52
3060	587	0.58	630	0.69	668	0.79	707	0.92	743	1.05	779	1.18	814	1.32	846	1.45	878	1.60	907	1.75
3400	643	0.77	683	0.89	718	1.00	753	1.13	787	1.26	820	1.41	853	1.56	884	1.71	915	1.86	944	2.02
3740	699	0.99	736	1.12	770	1.25	802	1.38	833	1.52	864	1.67	894	1.83	925	2.00	953	2.16	982	2.33
4080	757	1.26	790	1.40	823	1.55	853	1.69	882	1.83	910	1.98	938	2.15	967	2.32	994	2.50	1021	2.68
2-HP Standard Motor & Drive										3-HP Oversized Motor & Drive										

**Table PD-76 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2720	900	1.67	927	1.82	954	1.97	980	2.12	1006	2.28	1032	2.44	1057	2.60	1082	2.76	1105	2.92	1129	3.09
3060	936	1.90	962	2.06	989	2.22	1014	2.39	1039	2.56	1062	2.73	1085	2.90	1109	3.07	1133	3.25	1155	3.43
3400	973	2.17	999	2.34	1025	2.51	1050	2.68	1074	2.86	1097	3.04	1120	3.22	1142	3.41	—	—	—	—
3740	1010	2.50	1036	2.66	1062	2.84	1087	3.01	1110	3.19	1134	3.39	—	—	—	—	—	—	—	—
4080	1047	2.86	1073	3.04	1098	3.22	1123	3.40	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP+.5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.4750

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-77 — Belt Drive Evaporator Fan Performance — 8½-Ton — YHC102A3,A4,AW \*M— Medium Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)																				
2720	—	—	—	—	623	0.63	664	0.75	704	0.87	742	0.99	778	1.11	811	1.24	842	1.38	872	1.53
3060	589	0.58	632	0.69	670	0.80	709	0.92	745	1.06	781	1.19	815	1.32	848	1.46	880	1.60	909	1.75
3400	645	0.77	685	0.89	721	1.01	755	1.13	789	1.27	822	1.42	854	1.57	886	1.72	916	1.87	945	2.02
3740	702	1.00	739	1.14	772	1.26	804	1.39	836	1.53	867	1.69	897	1.85	926	2.01	956	2.18	984	2.34
4080	759	1.27	793	1.42	826	1.56	856	1.70	884	1.84	913	2.00	941	2.16	969	2.34	996	2.52	1024	2.70
2-HP Standard Motor & Drive										3-HP Oversized Motor & Drive										

**Table PD-77 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2720	900	1.67	928	1.82	955	1.98	982	2.14	1008	2.29	1033	2.45	1057	2.60	1083	2.77	1107	2.94	1129	3.10
3060	936	1.91	964	2.07	989	2.23	1015	2.39	1039	2.56	1063	2.73	1088	2.92	1111	3.09	1134	3.26	1157	3.44
3400	974	2.18	1001	2.35	1027	2.52	1051	2.69	1075	2.87	1098	3.05	1121	3.23	1144	3.42	—	—	—	—
3740	1011	2.50	1038	2.68	1064	2.85	1089	3.03	1113	3.22	1135	3.40	—	—	—	—	—	—	—	—
4080	1050	2.87	1076	3.05	1101	3.24	1126	3.43	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP+.5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.4750

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

(8½ Ton)  
High Efficiency

**Table PD-78 — Belt Drive Evaporator Fan Performance — 8½-Ton — YHC102A3,A4,AW \*H — High Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied																				
Low Static Drive (1)																				
2720	—	—	590	0.55	633	0.66	674	0.77	713	0.89	750	1.01	786	1.14	818	1.28	850	1.42	879	1.56
3060	602	0.62	643	0.72	682	0.83	719	0.96	756	1.09	791	1.23	825	1.36	857	1.50	889	1.65	917	1.80
3400	660	0.82	698	0.94	733	1.05	767	1.18	801	1.32	834	1.48	866	1.62	897	1.77	927	1.92	956	2.08
3740	718	1.06	754	1.19	787	1.32	818	1.45	849	1.60	880	1.76	910	1.92	939	2.08	968	2.24	996	2.41
4080	777	1.35	811	1.49	841	1.63	870	1.77	899	1.92	928	2.08	956	2.26	983	2.43	1011	2.61	1037	2.79
2-HP Standard Motor & Drive										3-HP Oversized Motor & Drive										

**Table PD-78 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2720	907	1.71	934	1.86	960	2.01	987	2.17	1014	2.33	1039	2.48	1063	2.64	1088	2.81	1112	2.97	1134	3.13
3060	945	1.95	971	2.11	997	2.28	1022	2.45	1047	2.62	1070	2.79	1094	2.96	1117	3.14	1141	3.31	—	—
3400	985	2.24	1010	2.40	1036	2.58	1060	2.76	1084	2.93	1106	3.11	1130	3.31	—	—	—	—	—	—
3740	1023	2.58	1049	2.75	1075	2.93	1099	3.11	1122	3.29	—	—	—	—	—	—	—	—	—	—
4080	1063	2.96	1089	3.15	1114	3.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750.

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-79 — Belt Drive Evaporator Fan Performance — 8½-Ton — YHC102A3,A4,AW \*L — Low Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied																				
Low Static Drive (1)																				
2720	622	0.62	669	0.73	711	0.84	760	0.97	807	1.12	849	1.26	884	1.38	915	1.50	944	1.62	972	1.74
3060	688	0.85	732	0.97	770	1.09	809	1.22	853	1.38	895	1.54	934	1.70	968	1.85	998	1.99	1026	2.13
3400	756	1.14	795	1.27	832	1.40	866	1.54	901	1.69	941	1.86	979	2.04	1015	2.22	1049	2.40	1079	2.56
3740	824	1.49	859	1.62	895	1.78	926	1.92	957	2.07	990	2.24	1025	2.42	1061	2.62	1095	2.82	1127	3.02
4080	893	1.90	925	2.05	958	2.21	988	2.37	1017	2.53	1046	2.70	1075	2.88	1108	3.08	1140	3.29	—	—
2-HP Standard Motor & Drive									3-HP Oversized Motor & Drive											

**Table PD-79 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2720	998	1.86	1024	1.98	1047	2.10	1071	2.22	1094	2.33	1115	2.45	1138	2.57	1159	2.69	1181	2.82	1201	2.94
3060	1053	2.26	1078	2.39	1102	2.53	1125	2.66	1146	2.79	1169	2.93	1190	3.06	1210	3.19	1230	3.32	1250	3.45
3400	1106	2.71	1131	2.86	1156	3.02	1179	3.16	1201	3.31	1223	3.45	—	—	—	—	—	—	—	—
3740	1158	3.21	1185	3.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4080	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP + .5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .4750.

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

## (8½ Ton) High Efficiency

**Table PD-80 — Belt Drive Evaporator Fan Performance — 8½-Ton — YHC102A3,A4,AW \*M — Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)																				
2720	625	0.62	671	0.73	714	0.84	763	0.98	809	1.13	851	1.27	885	1.39	917	1.51	946	1.63	974	1.75
3060	691	0.86	734	0.98	772	1.10	812	1.23	856	1.39	897	1.55	936	1.71	970	1.86	1001	2.00	1028	2.14
3400	759	1.15	798	1.28	835	1.41	868	1.55	904	1.70	943	1.87	982	2.05	1019	2.23	1052	2.41	1082	2.57
3740	827	1.50	863	1.64	898	1.79	930	1.94	960	2.09	994	2.26	1029	2.44	1064	2.64	1098	2.84	1130	3.03
4080	897	1.92	929	2.07	962	2.23	992	2.39	1021	2.55	1049	2.72	1079	2.90	1112	3.10	1144	3.31	—	—
2-HP Standard Motor & Drive									3-HP Oversized Motor & Drive											

**Table PD-80 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2720	1000	1.87	1025	1.99	1048	2.10	1072	2.22	1095	2.34	1117	2.46	1139	2.58	1161	2.70	1182	2.82	1203	2.95
3060	1054	2.27	1080	2.41	1103	2.53	1126	2.67	1149	2.80	1170	2.93	1192	3.07	1211	3.20	1231	3.33	—	—
3400	1108	2.73	1134	2.88	1158	3.03	1181	3.17	1204	3.33	—	—	—	—	—	—	—	—	—	—
3740	1160	3.23	1187	3.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4080	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP+.5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.4750

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-81 — Belt Drive Evaporator Fan Performance — 8½-Ton — YHC102A3,A4,AW \*H— High Heat —Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Field Supplied Low Static Drive (1)									2-HP Standard Motor & Drive											
2720	640	0.66	684	0.77	729	0.89	778	1.03	823	1.17	863	1.31	896	1.43	926	1.55	955	1.67	982	1.79
3060	709	0.91	750	1.03	788	1.15	829	1.29	872	1.45	913	1.61	950	1.77	983	1.92	1011	2.05	1038	2.19
3400	778	1.21	817	1.35	851	1.48	885	1.62	924	1.78	963	1.96	1000	2.14	1035	2.30	1067	2.49	1095	2.65
3740	848	1.58	885	1.73	917	1.88	948	2.03	979	2.18	1014	2.36	1050	2.56	1084	2.76	1118	2.96	1148	3.15
4080	919	2.02	952	2.18	984	2.35	1012	2.50	1041	2.67	1070	2.84	1102	3.04	1135	3.25	—	—	—	—
3-HP Oversized Motor & Drive																				

**Table PD-81 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2-HP Standard Motor & Drive																				
2720	1007	1.90	1032	2.02	1056	2.14	1079	2.26	1101	2.38	1124	2.50	1146	2.62	1167	2.74	1189	2.86	1209	2.98
3060	1064	2.32	1090	2.46	1113	2.59	1135	2.72	1157	2.85	1178	2.98	1199	3.12	1220	3.26	1240	3.39	—	—
3400	1121	2.80	1146	2.95	1170	3.10	1193	3.25	1215	3.40	—	—	—	—	—	—	—	—	—	—
3740	1177	3.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4080	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

2-HP Fan Motor Heat (MBH) = 2.000 x Fan BHP+.5000.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.4750

1. Field Supplied Fan Sheave AK79 and Belt AX38 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

# Performance Data

## (10 Ton) High Efficiency

**Table PD-82— Belt Drive Evaporator Fan Performance — 10-Ton — YHC120A3,A4,AW \*L,M — Low and Medium Heat — Downflow Airflow**

External Static Pressure (Inches of Water)																					
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
3-HP Standard Motor & Field Supplied Low Static Drive (1)																					
3200	—	—	—	—	—	—	743	1.06	779	1.20	814	1.35	847	1.49	879	1.63	910	1.78	938	1.93	
3600	—	—	—	735	1.10	768	1.22	802	1.36	834	1.50	866	1.66	897	1.82	927	1.98	957	2.14	985	2.30
4000	767	1.29	802	1.44	833	1.58	863	1.71	892	1.87	922	2.04	951	2.21	979	2.39	1006	2.56	1034	2.74	
4400	837	1.69	869	1.85	899	2.00	926	2.15	953	2.31	980	2.48	1007	2.66	1033	2.85	1059	3.04	1085	3.24	
4800	908	2.16	937	2.33	965	2.50	991	2.67	1017	2.83	1041	3.00	1066	3.19	1090	3.38	1115	3.59	1139	3.80	
3-HP Standard Motor & Drive																	5-HP Oversized Motor & Drive				

**Table PD-82 — Continued**

External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Drive																				
3200	966	2.10	992	2.26	1018	2.43	1042	2.60	1066	2.78	1091	2.96	1114	3.15	1136	3.33	1159	3.51	1182	3.70
3600	1013	2.47	1039	2.64	1065	2.82	1089	3.00	1113	3.19	1135	3.38	1157	3.56	1179	3.76	1201	3.97	1221	4.16
4000	1060	2.92	1086	3.10	1111	3.28	1135	3.47	1159	3.66	1182	3.86	1203	4.05	1224	4.26	1246	4.47	1266	4.68
4400	1110	3.43	1134	3.62	1159	3.82	1183	4.02	1205	4.22	1229	4.43	1251	4.64	1272	4.84	1292	5.05	1313	5.27
4800	1162	4.01	1185	4.22	1209	4.44	1231	4.64	1253	4.86	1276	5.07	1298	5.30	1319	5.51	1338	5.73	—	—
5-HP Oversized Motor & Drive																				
3200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4800	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .475.

5-HP Fan Motor Heat (MBH) = 2.950 x Fan BHP + .470.

1. Field Supplied Motor Sheave 1VM50 x 7/8 inch, Fan Sheave AK89, and Belt AX40 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-83— Belt Drive Evaporator Fan Performance — 10-Ton — YHC120A3,A4,AW \*H— High Heat —Downflow Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Field Supplied																	3-HP Standard Motor & Drive			
Low Static Drive (1)																				
3200	—	—	—	—	739	1.05	774	1.19	809	1.33	843	1.47	874	1.61	905	1.76	935	1.92	963	2.08
3600	738	1.11	772	1.23	805	1.37	838	1.52	869	1.68	900	1.84	930	2.00	960	2.16	988	2.32	1016	2.49
4000	813	1.49	844	1.63	873	1.77	903	1.93	932	2.10	961	2.27	989	2.45	1017	2.63	1043	2.80	1070	2.98
4400	889	1.95	917	2.10	944	2.25	971	2.42	998	2.59	1024	2.78	1050	2.97	1076	3.17	1101	3.37	1126	3.56
4800	964	2.50	991	2.66	1016	2.83	1040	3.00	1065	3.18	1090	3.38	1114	3.58	1138	3.79	1161	4.00	1184	4.22
5-HP Oversized Motor & Drive																				

**Table PD-83 — Continued**

		External Static Pressure (Inches of Water)																		
CFM	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Drive																				
3200	989	2.24	1015	2.41	1039	2.58	1064	2.76	1087	2.93	1111	3.12	1133	3.30	1156	3.48	1179	3.68	1200	3.85
3600	1042	2.66	1067	2.84	1091	3.02	1115	3.21	1138	3.40	1160	3.59	1181	3.78	1203	3.98	1224	4.19	1244	4.39
4000	1095	3.17	1120	3.35	1145	3.54	1167	3.73	1190	3.93	1212	4.14	1233	4.35	1253	4.55	1273	4.76	1293	4.97
4400	1150	3.75	1174	3.95	1197	4.15	1221	4.36	1243	4.56	1265	4.77	1285	4.97	1306	5.20	1326	5.42	1345	5.65
4800	1208	4.42	1231	4.64	1253	4.86	1275	5.07	1297	5.29	1317	5.50	1338	5.72	—	—	—	—	—	—
5-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories.

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP + .475.

5-HP Fan Motor Heat (MBH) = 2.950 x Fan BHP + .470.

1. Field Supplied Motor Sheave 1VM50 x 7/8 inch, Fan Sheave AK89, and Belt AX40 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

# (10 Ton) High Efficiency

**Table PD-84 — Belt Drive Evaporator Fan Performance — 10-Ton — YHC120A3,A4,AW \*L,M — Low and Medium Heat — Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Field Supplied Low Static Drive (1)																				
3200	—	—	777	1.15	814	1.28	853	1.42	895	1.59	936	1.76	973	1.93	1008	2.09	1037	2.24	1064	2.38
3600	819	1.42	857	1.57	890	1.71	922	1.85	957	2.02	994	2.20	1032	2.39	1067	2.58	1099	2.77	1131	2.96
4000	902	1.91	936	2.07	968	2.23	998	2.39	1027	2.55	1058	2.73	1091	2.93	1124	3.14	1158	3.36	1189	3.57
4400	986	2.50	1016	2.68	1047	2.86	1075	3.03	1101	3.20	1128	3.39	1155	3.58	1186	3.80	1217	4.03	1246	4.25
4800	1070	3.22	1098	3.40	1127	3.60	1153	3.79	1178	3.98	1203	4.17	1227	4.37	1251	4.57	1279	4.80	1307	5.05
										5-HP Oversized Motor & Drive										
3-HP Standard Motor& Drive																				

**Table PD-84 — Continued**

External Static Pressure (Inches of Water)																						
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00			
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
3-HP Standard Motor & Drive																						
3200	1090	2.53	1115	2.67	1139	2.81	1161	2.95	1183	3.09	1205	3.23	1225	3.37	1246	3.51	1265	3.65	1284	3.78		
3600	1157	3.13	1181	3.29	1205	3.45	1228	3.61	1250	3.77	1272	3.93	1293	4.09	1312	4.24	1331	4.40	1351	4.56		
4000	1218	3.78	1246	3.99	1271	4.18	1294	4.36	1317	4.55	1338	4.72	1360	4.91	1379	5.07	1398	5.25	1418	5.43		
4400	1276	4.49	1304	4.73	1333	4.97	1359	5.20	1383	5.42	1405	5.62	—	—	—	—	—	—	—	—		
4800	1336	5.30	1363	5.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
5-HP Oversized Motor & Drive																						

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.475.

5-HP Fan Motor Heat (MBH) = 2.950 x Fan BHP+.470.

1. Field Supplied Motor Sheave 1VM50 x 7/8 inch, Fan Sheave AK89, and Belt AX40 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

**Table PD-85 — Belt Drive Evaporator Fan Performance — 10-Ton — YHC120A3,A4,AW \*H— High Heat —Horizontal Airflow**

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Field Supplied Low Static Drive (1)									3-HP Standard Motor & Drive											
3200	785	1.18	821	1.31	861	1.46	903	1.62	944	1.80	981	1.96	1014	2.12	1043	2.27	1070	2.41	1095	2.55
3600	874	1.64	907	1.78	939	1.93	977	2.11	1014	2.30	1050	2.49	1084	2.69	1115	2.87	1144	3.05	1169	3.21
4000	964	2.21	994	2.37	1023	2.53	1053	2.71	1087	2.91	1121	3.12	1154	3.33	1185	3.55	1215	3.76	1242	3.96
4400	1055	2.91	1082	3.08	1109	3.25	1135	3.43	1164	3.64	1194	3.86	1225	4.09	1255	4.32	1284	4.56	1312	4.79
4800	1146	3.74	1171	3.92	1196	4.11	1220	4.31	1244	4.51	1271	4.73	1298	4.97	1327	5.22	1354	5.47	1382	5.74
5-HP Oversized Motor & Drive																				

**Table PD-85 — Continued**

External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-HP Standard Motor & Drive																				
3200	1120	2.70	1143	2.84	1166	2.98	1188	3.12	1208	3.25	1229	3.39	1249	3.53	1269	3.67	1289	3.82	1308	3.96
3600	1194	3.37	1217	3.53	1240	3.69	1262	3.85	1282	4.01	1303	4.17	1322	4.32	1341	4.48	1361	4.64	1378	4.79
4000	1269	4.16	1292	4.34	1314	4.52	1335	4.70	1356	4.88	1377	5.06	1397	5.24	1415	5.41	—	—	—	—
4400	1339	5.02	1365	5.25	1388	5.47	1410	5.67	—	—	—	—	—	—	—	—	—	—	—	—
4800	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5-HP Oversized Motor & Drive																				

For Standard Evaporator Fan Speed (RPM), reference Table PD-86.

Notes:

Data includes pressure drop due to standard filters and wet coils.

No accessories or options are included in pressure drop data.

Refer to Table PD-89 to determine additional static pressure drop due to other options/accessories

3-HP Fan Motor Heat (MBH) = 2.900 x Fan BHP+.475.

5-HP Fan Motor Heat (MBH) = 2.950 x Fan BHP+.470.

1. Field Supplied Motor Sheave 1VM50 x 7/8 inch, Fan Sheave AK89, and Belt AX40 required.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.



# Performance Data

**Table PD-86— Standard Motor & Sheave/Fan Speed (Rpm)**

Tons	Unit Model No.	6Turns Open	5Turns Open	4Turns Open	3Turns Open	2Turns Open	1Turn Open	Closed
3	Y*C036A	NA	745	819	894	968	1043	1117
4	Y*C048A	NA	833	916	1000	1083	1167	1250
5	Y*C060A	NA	897	987	1077	1166	1256	1346
6	Y*C072A	N/A	723	779	835	890	946	1002
7½	Y*C090,092A	N/A	835	891	946	1002	1057	1113
8½	Y*C102A	N/A	787	847	908	968	1029	1089
10	Y*C120A	N/A	908	969	1029	1090	1150	1211

Factory set at 3 turns open.

**Table PD-87— Standard Motor & High Static Drive Accessory Sheave/Fan Speed (Rpm)**

Tons	Unit Model No.	6Turns Open	5Turns Open	4Turns Open	3Turns Open	2Turns Open	1Turn Open	Closed
6	Y*C072A3,A4,AW	N/A	831	895	959	1022	1086	1150
6	YSC072AK	N/A	958	1022	1086	1150	1214	1278
7½	YSC090,092A	N/A	958	1022	1086	1150	1214	1278

Factory set at 3 turns open.

**Table PD-88 — Oversized Motor & Drive Sheave/Fan Speed (Rpm)**

Tons	Unit Model No.	6Turns Open	5Turns Open	4Turns Open	3Turns Open	2Turns Open	1Turn Open	Closed
6	Y*C072A3, A4, AW	N/A	958	1022	1086	1150	1214	1278
7½	Y*C090,092A	N/A	1068	1150	1232	1315	1397	1479
8½	Y*C102A	N/A	958	1022	1086	1150	1214	1278
10	Y*C120A	1050	1135	1200	1275	1350	1425	N/A

Factory set at 3 turns open.

\* Indicates both standard and high efficiency units.

\*Indicates both ReliaTel and Electromechanical controls.

# Performance Data

**Table PD-89 — Static Pressure Drops Through Accessories (Inches Water Column)**

Tons	Unit Model No	CFM	Standard Filters <sup>1</sup>	Through Reheat Coil (WC)	2" Pleated Filters	Economizer with OA/RA Dampers <sup>2</sup>			
						100% OA	100% RA	100% OA	100% RA
						Downflow		Horizontal	
3	YSC036A	960	0.03	—	0.05	0.05	0.01	0.05	0.00
		1200	0.04	—	0.07	0.07	0.02	0.07	0.01
		1440	0.06	—	0.10	0.10	0.03	0.10	0.01
	YHC036A	960	0.02	.03	0.04	0.05	0.01	0.05	0.00
		1200	0.03	.04	0.05	0.07	0.02	0.07	0.01
		1440	0.04	.06	0.07	0.10	0.03	0.10	0.01
4	YSC048A	1280	0.04	—	0.06	0.08	0.03	0.08	0.01
		1600	0.05	—	0.09	0.12	0.04	0.12	0.01
		1920	0.08	—	0.12	0.17	0.06	0.17	0.02
	YHC048A	1280	0.04	.05	0.06	0.08	0.03	0.08	0.01
		1600	0.05	.07	0.09	0.12	0.04	0.12	0.01
		1920	0.08	.09	0.12	0.17	0.06	0.17	0.02
5	YSC060A	1600	0.10	—	0.15	0.12	0.04	0.12	0.01
		2000	0.15	—	0.22	0.18	0.07	0.18	0.02
		2400	0.22	—	0.29	0.26	0.10	0.26	0.04
	YHC060A	1600	0.04	0.07	0.07	0.12	0.04	0.12	0.01
		2000	0.06	0.10	0.10	0.18	0.07	0.18	0.02
		2400	0.09	0.14	0.14	0.26	0.10	0.26	0.04
6	Y*C072A	1920	0.04	—	0.07	0.10	0.01	0.06	0.02
		2400	0.06	—	0.09	0.11	0.02	0.08	0.02
		2880	0.09	—	0.12	0.13	0.04	0.10	0.04
7½	YSC090, 092A	2400	0.06	—	0.09	0.11	0.02	0.08	0.02
		3000	0.10	—	0.13	0.14	0.05	0.12	0.05
		3600	0.14	—	0.18	0.21	0.07	0.25	0.08
	YHC092A	2400	0.04	.10	0.06	0.11	0.02	0.08	0.02
		3000	0.06	.14	0.09	0.14	0.05	0.12	0.05
		3600	0.09	.19	0.13	0.21	0.07	0.25	0.08
8½	YSC102A	2720	0.05	—	0.08	0.12	0.03	0.09	0.04
		3400	0.08	—	0.11	0.19	0.06	0.18	0.06
		4080	0.12	—	0.16	0.30	0.07	0.31	0.09
	YHC102A	2720	0.05	.12	0.08	0.12	0.03	0.09	0.04
		3400	0.08	.17	0.11	0.19	0.06	0.18	0.06
		4080	0.12	.23	0.16	0.30	0.07	0.31	0.09
10	YSC120A	3200	0.07	—	0.10	0.17	0.05	0.14	0.05
		4000	0.11	—	0.15	0.26	0.07	0.30	0.08
		4800	0.16	—	0.20	0.34	0.09	0.35	0.10
	YHC120A	3200	—	0.15	0.10	0.17	0.05	0.14	0.05
		4000	—	0.22	0.15	0.26	0.07	0.30	0.08
		4800	0.16	0.31	0.20	0.34	0.09	0.35	0.10

Notes:

1. Tested with standard filters (3-5 tons 1", 6-10 tons 2"). Difference in pressure drop should be considered when utilizing optional 2" pleated filters.

2. OA = Outside Air and RA = Return Air.

# Performance Data

**Table PD-90— Outdoor Sound Power Level - dB (ref. 10<sup>-12</sup> Watts)**

Tons	Unit	Octave Center Frequency								Overall dBA
	Model No.	63.	125	250	500	1000	2000	4000	8000	
3	Y*C036A	86	83	81	80	78	74	69	68	83
	YSC048A1	92	87	84	83	81	76	72	69	86
4	YSC048A3,A4,AW	90	84	78	77	76	72	70	68	82
	YHC048A	92	86	83	82	81	75	72	69	85
5	YSC060A	94	87	83	82	79	75	73	69	84
	YHC060A	94	87	82	81	78	74	72	69	84
6	YSC072A	90	94	90	87	83	78	74	67	88
	YHC072A	91	95	90	87	84	79	75	68	89
7½	YSC090A	92	95	91	88	84	80	75	68	90
	YSC092A	89	93	88	85	81	76	72	66	87
8½	YHC092A	92	96	92	89	85	80	76	69	91
	YSC102A	88	92	87	84	80	75	72	65	86
10	YHC102A	91	95	90	87	84	79	75	68	89
	YSC120A	91	88	84	82	81	76	73	67	86
	YHC120A	94	89	87	85	84	78	75	69	88

Note:

Tests follow ARI270-95.

**Table PD-91 — Gas-Fired Heating Capacities**

Tons	Efficiency	Unit Model No.	Heating Input MBH <sup>1</sup>	Heating Output MBH <sup>1</sup>	Air Temp. Rise, F
3	Standard and High Efficiency	Y*C036A1*L	60.0	47.0	25-55
		Y*C036A3, A4, AW*L	60.0	48.0	25-56
		Y*C036A1*M	80.0	63.0	35-65
		Y*C036A3, A4, AW*M	80.0	64.0	35-65
		Y*C036A1*H	120.0	95.0	55-85
		Y*C036A3, A4, AW*H	120.0	96.0	55-85
4	Standard and High Efficiency	Y*C048A1*L	60.0	47.0	15-45
		Y*C048A3, A4, AW *L	60.0	48.0	15-45
		Y*C048A1*M	80.0	63.0	20-50
		Y*C048A3, A4, AW*M	80.0	64.0	20-50
		Y*C048A1*H	120.0	95.0	40-70
		Y*C048A3, A4, AW *H	120.0	96.0	40-70
5	Standard Eff.	YSC060A1*L	60.0	47.0	10-40
		YSC060A3, A4, AW, AK*L	60.0	48.0	10-40
		YSC060A1*M	80.0	63.0	15-45
		YSC060A3 A4, AW*M	80.0	64.0	15-45
		YSC060A1*H	130.0	103.0	35-65
		YSC060A3, A4, AW, AK*H	130.0	104.0	35-65
	High Eff.	YHC060A1*L	60.0	47.0	10-40
		YHC060A3, A4, AW, AK*L	60.0	48.0	10-40
		YHC060A1*M	80.0	63.0	15-45
		YHC060A3,A4,AW*M	80.0	64.0	15-45
		YHC060A1*H	130.0	103.0	35-65
		YHC060A3, A4, AW, AK*H	130.0	104.0	35-65
6	Standard and High Efficiency	Y*C072A1, A3, A4, AW, AK*L	80.0	64.8	15-45
		Y*C072A1, A3, A4, AW*M	120.0/84	97.2/68	20-50
		Y*C072A1, A3, A4, AW, AK*H	150.0/105	121.5/85	25-55
7½	Standard and High Efficiency	Y*C090,092A1, A3, A4, AW, AK*L	120.0/84	97.2/68	20-50
		Y*C090,092A1, A3, A4, AW*M	150.0/105	121.5/85	25-55
		Y*C090,092A1, A3, A4, AW, AK*H	200.0/140	162.0/113	35-65
8½	Standard and High Efficiency	Y*C102A1, A3, A4, AW, AK*L	120.0/84	97.2/68	15-45
		Y*C102A1, A3, A4, AW*M	150.0/105	121.5/85	20-50
		Y*C102A1, A3, A4, AW, AK*H	200.0/140	162.0/113	35-65
10	Standard and High Efficiency	Y*C120A1, A3, A4, AW, AK*L	150.0/105	121.5/85	20-50
		Y*C120A1, A3, A4, AW*M	200.0/140	162.0/113	25-55
		Y*C120A1, A3, A4, AW, AK*H	250.0/175	202.5/141.8	35-65

Ratings shown are for elevations up to 2,000 ft. For higher elevations, reduce ratings at a rate of 4% per 1,000 ft. elevation.

Note:

1. For two stage heaters, Second stage is total heating capacity. Second Stage / First Stage.

\*Indicates both standard and high efficiency airflow.

# Performance Data

**Table PD-92— Hot Gas Reheat Temperature Rise<sup>3</sup>**

SCFM		Leaving Evaporator Dry Bulb [F]						
Tons	SCFM	35	40	45	50	55	60	65
3	960	17.6	17.3	17.0	16.6	16.2	15.8	15.5
	1080	16.7	16.4	16.1	15.7	15.4	15.0	14.6
	1200	15.8	15.5	15.2	14.9	14.5	14.1	13.8
	1320	14.9	14.6	14.3	14.0	13.6	13.3	12.9
	1440	14.0	13.8	13.5	13.1	12.8	12.4	12.0
4	1280	19.0	18.7	18.4	18.1	17.9	17.5	17.2
	1440	17.9	17.7	17.4	17.1	16.9	16.5	16.2
	1600	16.9	16.6	16.4	16.1	15.8	15.5	15.2
	1760	15.9	15.6	15.4	15.1	14.8	14.5	14.2
	1920	14.8	14.6	14.4	14.1	13.8	13.5	13.2
5	1600	20.3	20.1	19.9	19.7	19.5	19.3	19.0
	1800	19.1	18.9	18.7	18.5	18.4	18.1	17.8
	2000	17.9	17.8	17.6	17.4	17.2	16.9	16.6
	2200	16.8	16.6	16.4	16.2	16.0	15.7	15.4
	2400	15.6	15.4	15.2	15.1	14.9	14.6	14.3
7½	2400	16.7	17.3	18.0	18.7	19.3	20.1	20.9
	2700	14.9	15.5	16.1	16.7	17.3	18.0	18.7
	3000	13.1	13.7	14.2	14.7	15.2	15.9	16.5
	3300	11.4	11.8	12.3	12.7	13.1	13.7	14.3
	3600	9.6	10.0	10.3	10.7	11.1	11.6	12.2
8½	2720	16.6	17.4	18.2	18.9	19.7	20.3	21.0
	3060	14.7	15.3	15.9	16.6	17.2	17.7	18.1
	3400	12.7	13.2	13.7	14.2	14.7	15.0	15.3
	3740	10.7	11.1	11.4	11.8	12.2	12.3	12.5
	4080	8.7	9.0	9.2	9.4	9.6	9.7	9.7
10	3200	18.7	19.5	20.3	21.2	22.0	22.7	23.4
	3600	16.2	17.2	18.1	19.1	20.1	20.8	21.6
	4000	13.8	14.9	15.9	17.0	18.1	19.0	19.8
	4400	11.3	12.5	13.7	14.9	16.1	17.1	18.1
	4800	8.9	10.2	11.5	12.9	14.2	15.3	16.3

**Notes:**

1. Temperature rise does not account for indoor fan heat.
2. 70 deg OD Ambient Temperature.
3. For units with the Dehumidification (Hot Gas Reheat) option.

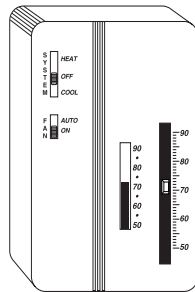
# Controls

## ReliaTel™ Controlled Units

**Zone Sensors** are the building occupant's comfort control devices for Precedent™ units with the Micro control:

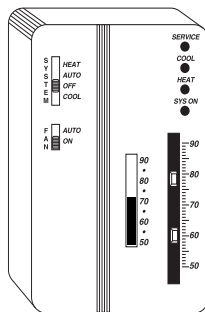
### Manual Changeover

Heat, Cool or Off System Switch. Fan Auto or Off Switch. One temperature setpoint lever.



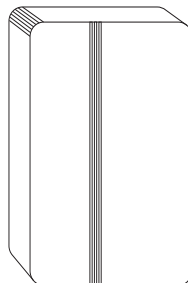
### Manual/Automatic Changeover

Auto, Heat, Cool or Off System Switch. Fan Auto or Off Switch. Two temperature setpoint levers. Optional Status Indication LED lights, System On, Heat, Cool, or Service.



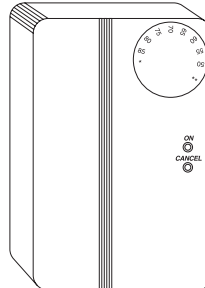
### Remote Sensor

Sensor(s) available for all zone sensors to provide remote sensing capabilities.



## Integrated Comfort™ System

Sensor(s) available with optional temperature adjustment and override buttons to provide central control through a Trane Integrated Comfort™ system.

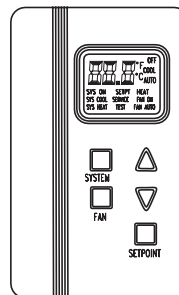


## Dual Thermistor Remote Zone Sensor

This sensor will allow the customer to reduce the total number of remote sensors to obtain space temperature averaging. This sensor should be utilized with ReliaTel controls.

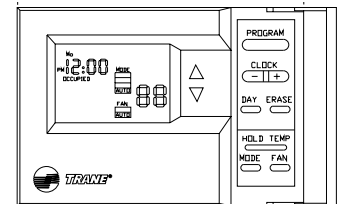
## Digital Display Zone Sensor

The Digital LCD (Liquid Crystal Display) zone sensor has the look and functionality of standard zone sensors. This sensor includes a digital display of set point adjustment and space temperature in F (Fahrenheit) or C (Celsius). Includes FAN and SYSTEM buttons (supports the service functions of the standard sensor). E-squared memory stores last programmed set points. Requires 24 VAC (Volts AC). This sensor should be utilized with ReliaTel™ controls.



## Programmable Night Setback

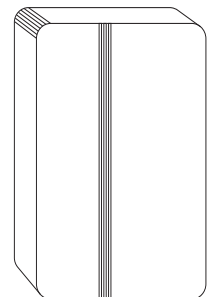
Auto or manual changeover with seven-day programming. Keyboard selection of



Heat, Cool, Fan, Auto, or On. All programmable sensors have System On, Heat, Cool, Service LED/indicators as standard. Night Setback Sensors have one (1) Occupied, one (1) Un-occupied, and two (2) Override programs per day.

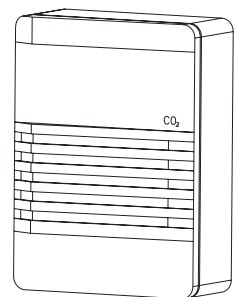
## Humidity Sensor

Field installed, wall-mounted or duct-mounted humidity sensor is used to control activation of the hot gas reheat dehumidification option. The humidity sensor can be set for humidity levels between 40% and 60% relative humidity by adjusting the ReliaTel Options Module.



## CO<sub>2</sub> Sensing

The CO<sub>2</sub> sensor shall have the ability to monitor space occupancy levels within the building by measuring the parts per million of CO<sub>2</sub> (Carbon Dioxide) in the air. As the CO<sub>2</sub> levels increase, the outside air damper modulates to meet the CO<sub>2</sub> space ventilation requirements. The CO<sub>2</sub> accessory shall be available as field installed.



# Controls

---

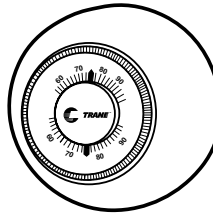
## Electromechanically Controlled Units

### Conventional Thermostats

The building occupant's comfort control devices for electromechanically controlled units.

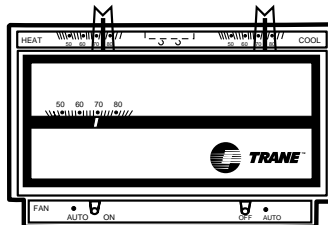
### Manual Changeover

One Heat, One Cool Thermostat. Heat, Cool or Off System Switch. Fan Auto or On Switch. Set Point Dial. Adjustable Heat Anticipator.



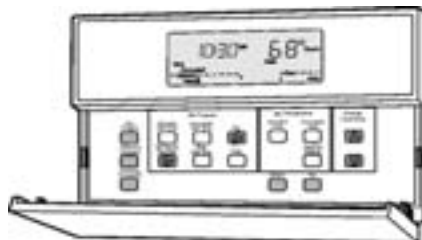
### Automatic Changeover

One Heat, Two Cool Thermostat. Off, Auto System Switch. Auto/On Fan Switch.



### Programmable Electronic Night Setback Thermostat

Heating setback and cooling setup with 7-day, 5-1-1 programming capability. Available in two heating/cooling or one heating/cooling versions with automatic changeover.



# Electrical Data

## (Standard Efficiency)

**Table ED-1 — Unit Wiring - Standard Efficiency**

Tons	Unit Model No.	Unit Operating Voltage Range	Standard Indoor Fan Motor		Oversize Indoor Fan Motor		Optional Belt Drive Indoor Fan Motor	
			Minimum Circuit Ampacity	Maximum Fuse Size or Maximum Circuit Breaker <sup>1</sup>	Minimum Circuit Ampacity	Maximum Fuse Size or Maximum Circuit Breaker <sup>1</sup>	Minimum Circuit Ampacity	Maximum Fuse Size or Maximum Circuit Breaker <sup>1</sup>
3	YSC036A1	187-253	25.3	40	27.7	40	—	—
	YSC036A3	187-253	17.9	25	20.3	30	20.6	30
	YSC036A4	414-506	9.2	15	10.4	15	10.6	15
	YSC036AW	517-633	7.7	15	8.3	15	8.3	15
4	YSC048A1	187-253	34.0	50	36.1	50	—	—
	YSC048A3	187-253	23.9	35	26.0	40	25.3	35
	YSC048A4	414-506	12.8	20	14.4	20	13.6	20
	YSC048AW	517-633	9.8	15	10.6	15	10.0	15
5	YSC060A1	187-253	47.3	60	49.0	60	—	—
	YSC060A3	187-253	31.5	50	33.6	50	30.3	45
	YSC060A4	414-506	16.0	25	16.3	25	15.6	25
	YSC060AW	517-633	12.2	15	12.8	20	11.8	15
	YSC060AK	342-418	19.6	30	—	—	—	—
6	YSC072A3	187-253	32.7	50	34.0	50	—	—
	YSC072A4	414-506	17.6	25	18.2	25	—	—
	YSC072AW	517-633	12.8	20	13.6	20	—	—
	YSC072AK	342-418	23.2	35	—	—	—	—
7½	YSC090A3	187-253	42.7	60	45.8	60	—	—
	YSC090A4	414-506	22.6	35	24.1	35	—	—
	YSC090AW	517-633	17.6	25	18.8	25	—	—
	YSC090AK	342-418	28.9	40	29.9	45	—	—
	YSC092A3	187-253	38.9	50	42.0	50	—	—
	YSC092A4	414-506	20.5	25	22.0	25	—	—
	YSC092AW	517-633	15.5	20	16.7	20	—	—
	YSC102A3	187-253	45.1	60	48.2	60	—	—
8½	YSC102A4	414-506	24.0	30	25.5	35	—	—
	YSC102AW	517-633	19.5	25	20.7	25	—	—
	YSC102AK	342-418	29.6	40	31.1	40	—	—
10	YSC120A3	187-253	52.6	60	56.6	70	—	—
	YSC120A4	414-506	26.9	35	28.9	35	—	—
	YSC120AW	517-633	21.8	25	23.5	30	—	—
	YSC120AK	342-418	32.8	40	35.6	45	—	—

Notes:

1. HACR breaker per NEC.

# Electrical Data

(High Efficiency)

**Table ED-2 — Unit Wiring - High Efficiency**

Tons	Unit Model No.	Unit Operating Voltage Range	Standard Indoor Fan Motor		Oversize Indoor Fan Motor		Belt Drive Indoor Fan Motor	
			Minimum Circuit Ampacity	Maximum Fuse Size or Maximum Circuit Breaker <sup>1</sup>	Minimum Circuit Ampacity	Maximum Fuse Size or Maximum Circuit Breaker <sup>1</sup>	Minimum Circuit Ampacity	Maximum Fuse Size or Maximum Circuit Breaker <sup>1</sup>
3	YHC036A1	187-253	23.9	40	26.3	40	—	—
	YHC036A3	187-253	17.2	25	19.6	30	19.9	30
	YHC036A4	414-506	9.0	15	10.2	15	10.4	15
	YHC036AW	517-633	7.1	15	7.7	15	7.7	15
4	YHC048A1	187-253	29.4	45	31.5	50	—	—
	YHC048A3	187-253	21.2	30	23.3	35	22.6	35
	YHC048A4	414-506	11.0	15	12.6	15	11.8	15
	YHC048AW	517-633	8.3	15	9.1	15	8.5	15
5	YHC060A1	187-253	39.5	60	41.2	60	—	—
	YHC060A3	187-253	30.0	45	31.7	45	28.8	45
	YHC060A4	414-506	14.7	20	15.0	20	14.3	20
	YHC060AW	517-633	11.8	15	12.4	15	11.4	15
6	YHC072A3	187-253	34.8	50	36.1	50	—	—
	YHC072A4	414-506	17.5	25	18.1	25	—	—
	YHC072AW	517-633	13.5	20	14.3	20	—	—
7½	YHC092A3	187-253	38.1	50	41.2	50	—	—
	YHC092A4	414-506	19.4	25	20.9	25	—	—
	YHC092AW	517-633	14.8	15	16.0	20	—	—
8½	YHC102A3	187-253	42.3	50	45.4	60	—	—
	YHC102A4	414-506	21.4	25	22.9	30	—	—
	YHC102AW	517-633	16.6	20	17.8	20	—	—
10	YHC120A3	187-253	48.6	60	52.6	60	—	—
	YHC120A4	414-506	25.3	30	27.3	35	—	—
	YHC120AW	517-633	19.9	25	21.6	25	—	—

Notes:

1. HACR breaker per NEC.



# Electrical Data

**Table ED-3 — Electrical Characteristics — Evaporator Fan Motors — Direct Drive**

Tons	Unit Model No.	Standard Evaporator Fan Motor						Oversized Evaporator Fan Motor					
		No.	Volts	Phase	HP	Amps		No.	Volts	Phase	HP	Amps	
						FLA	LRA					FLA	LRA
3	Y*C036A1	1	208-230	1	.33	2.30	3.90	1	208-230	1	.50	4.70	9.80
	Y*C036A3	1	208-230	1	.33	2.30	3.90	1	208-230	1	.50	4.70	9.80
	Y*C036A4	1	460	1	.33	1.10	2.00	1	460	1	.50	2.30	5.20
	Y*C036AW	1	575	1	.33	1.10	1.80	1	460	1	.50	1.70	3.60
4	Y*C048A1	1	208-230	1	.60	3.60	6.60	1	208-230	1	.80	5.70	13.60
	Y*C048A3	1	208-230	1	.60	3.60	6.60	1	208-230	1	.80	5.70	13.60
	Y*C048A4	1	460	1	.60	1.70	2.80	1	460	1	.80	3.30	7.20
	Y*C048AW	1	575	1	.60	1.50	2.40	1	575	1	.80	2.30	5.80
5	Y*C060A1	1	208-230	1	.90	6.20	14.0	1	208-230	1	1.00	7.90	16.40
	Y*C060A3	1	208-230	1	.90	6.20	14.0	1	208-230	1	1.00	7.90	16.40
	Y*C060A4	1	460	1	.90	2.90	6.60	1	460	1	1.00	3.20	8.20
	Y*C060AW	1	575	1	.90	2.10	4.90	1	575	1	1.00	2.70	5.00
	YSC060AK	1	380	1	1.00	4.30	8.30	N/A	N/A	N/A	N/A	N/A	N/A

**Table ED-4 — Electrical Characteristics — Evaporator Fan Motors — Belt Drive**

Tons	Unit Model No.	Standard Evaporator Fan Motor						Oversized Evaporator Fan Motor					
		No.	Volts	Phase	HP	Amps		No.	Volts	Phase	HP	Amps	
						FLA	LRA					FLA	LRA
3	Y*C036A3	1	208-230	3	1.0	5.0	32.2	—	—	—	—	—	—
	Y*C036A4	1	460	3	1.0	2.5	16.1	—	—	—	—	—	—
	Y*C036AW	1	575	3	1.0	1.7	13.2	—	—	—	—	—	—
4	Y*C048A3	1	208-230	3	1.0	5.0	32.2	—	—	—	—	—	—
	Y*C048A4	1	460	3	1.0	2.5	16.1	—	—	—	—	—	—
	Y*C048AW	1	575	3	1.0	1.7	13.2	—	—	—	—	—	—
5	Y*C060A3	1	208-230	3	1.0	5.0	32.2	—	—	—	—	—	—
	Y*C060A4	1	460	3	1.0	2.5	16.1	—	—	—	—	—	—
	Y*C060AW	1	575	3	1.0	1.7	13.2	—	—	—	—	—	—
	YSC060AK	1	380	1	1.0	4.3	8.3	—	—	—	—	—	—
6	Y*C072A3	1	208-230	3	1.00	5.00	32.20	1	208-230	3	2.00	6.30	48.00
	Y*C072A4	1	460	3	1.00	2.50	16.10	1	460	3	2.00	3.10	24.00
	Y*C072AW	1	575	3	1.00	1.70	13.20	1	575	3	2.00	2.50	18.20
	YSC072AK	1	380	3	2.0	4.9	35.0	—	—	—	—	—	—
7½	YSC090A3	1	208-230	3	2.00	6.30	48.00	1	208-230	3	3.00	9.40	83.00
	YSC090A4	1	460	3	2.00	3.10	24.00	1	460	3	3.00	4.60	42.00
	YSC090AW	1	575	3	2.00	2.50	18.20	1	575	3	3.00	3.70	31.00
	YSC090AK	1	380	3	2.0	4.9	35.0	1	380	3	3.0	6.4	51.1
8½	Y*C092A3	1	208-230	3	2.00	6.30	48.00	1	208-230	3	3.00	9.40	83.00
	Y*C092A4	1	460	3	2.00	3.10	24.00	1	460	3	3.00	4.60	42.00
	Y*C092AW	1	575	3	2.00	2.50	18.20	1	575	3	3.00	3.70	31.00
10	YSC102A3	1	208-230	3	2.00	6.30	48.00	1	208-230	3	3.00	9.40	83.00
	YSC102A4	1	460	3	2.00	3.10	24.00	1	460	3	3.00	4.60	42.00
	YSC102AW	1	575	3	2.00	2.50	18.20	1	575	3	3.00	3.70	31.00
	YSC102AK	1	380	3	2.0	4.9	35.0	1	380	3	3.0	6.4	51.1
10	Y*C120A3	1	208-230	3	3.00	9.40	83.00	1	208-230	3	5.00	13.40	112.00
	Y*C120A4	1	460	3	3.00	4.60	42.00	1	460	3	5.00	6.60	56.00
	Y*C120AW	1	575	3	3.00	3.70	31.00	1	575	3	5.00	5.40	41.00
	YSC120AK	1	380	3	3.0	6.4	51.1	1	380	3	5.0	10.8	66.5

\*Indicates both standard and high efficiency airflow.



# Electrical Data (Standard Efficiency)

**Table ED-5 — Electrical Characteristics — Compressor Motor And Condenser Motor — Standard Efficiency**

Unit		Compressor Motor						Condenser Fan Motors					
		No.	Volts	Phase	HP <sup>2</sup>	RPM	Amps		No.	Phase	HP	Amps	
Tons	Model No.						FLA	LRA				FLA	LRA
3	YSC036A1	1	208-230	1	3.1	3450	17.2	104.0	1	1	.20	1.5	2.5
	YSC036A3	1	208-230	3	3.1	3450	11.3	74.0	1	1	.20	1.5	2.5
	YSC036A4	1	460	3	3.1	3450	6.0	37.6	1	1	.20	0.6	1.3
	YSC036AW	1	575	3	3.1	3450	4.9	30.4	1	1	.20	0.5	1.2
4	YSC048A1	1	208-230	1	3.9	3450	22.7	131.0	1	1	.33	2.0	6.6
	YSC048A3	1	208-230	3	3.9	3450	14.6	91.0	1	1	.33	2.0	6.6
	YSC048A4	1	460	3	3.9	3450	7.9	46.0	1	1	.33	1.2	2.5
	YSC048AW	1	575	3	3.9	3450	6.1	37.0	1	1	.33	0.7	1.5
5	YSC060A1	1	208-230	1	5.1	3450	31.3	144.0	1	1	.33	2.0	6.6
	YSC060A3	1	208-230	3	5.1	3450	18.6	128.0	1	1	.33	2.0	6.6
	YSC060A4	1	460	3	5.1	3450	9.5	63.0	1	1	.33	1.2	2.5
	YSC060AW	1	575	3	5.1	3450	7.5	49.0	1	1	.33	0.7	1.5
6	YSC060AK	1	380	3	5.1	3450	11.4	64	1	1	.40	1.1	4.3
	YSC072A3	1	208-230	3	6	3450	19.0	156	1	1	.70	3.85	9.30
	YSC072A4	1	460	3	6	3450	10.1	75	1	1	.70	2.50	5.80
	YSC072AW	1	575	3	6	3450	7.7	54	1	1	.70	1.54	3.60
7½	YSC072AK	1	380	3	6	3450	12.2	70	1	1	.75	2.5	7.7
	YSC090A3	1	208-230	3	7.5	3450	26.0	181.5	1	1	.70	3.85	9.30
	YSC090A4	1	460	3	7.5	3450	13.6	95.0	1	1	.70	2.50	5.80
	YSC090AW	1	575	3	7.5	3450	10.9	69.0	1	1	.70	1.54	3.60
8½	YSC090AK	1	380	3	7.5	3450	16.4	106.3	1	1	.75	2.5	7.7
	YSC092A3	2	208-230	3	4/2.8	3450	14.7/10.3	91/77	1	1	.70	3.85	9.30
	YSC092A4	2	460	3	4/2.8	3450	7.6/5.4	50/39	1	1	.70	2.50	5.80
	YSC092AW	2	575	3	4/2.8	3450	5.8/4.2	37/31	1	1	.70	1.54	3.60
10	YSC102A3	2	208-230	3	5.1/2.8	3450	18.6/10.3	128/77	1	1	.75	4.0	9.4
	YSC102A4	2	460	3	5.1/2.8	3450	10.0/5.4	63/39	1	1	.75	2.8	6.8
	YSC102AW	2	575	3	5.1/2.8	3450	8.2/4.2	49/31	1	1	.75	2.4	6.2
	YSC102AK	1	380	3	5.1/2.8	3450	12.1/6.6	64/39	1	1	.75	2.5	7.7
10	YSC120A3	2	208-230	3	5.1/3.9	3450	18.6/14.7	128/91	1	1	.75	4.0	9.4
	YSC120A4	2	460	3	5.1/3.9	3450	9.5/7.4	63/46	1	1	.75	2.8	6.8
	YSC120AW	2	575	3	5.1/3.9	3450	7.8/5.8	49/37	1	1	.75	2.4	6.2
	YSC120AK	1	380	3	5.1/3.9	3450	11.5/9.0	64/54	1	1	.75	2.5	7.7

# Electrical Data

(High Efficiency)

**Table ED-6 — Electrical Characteristics — Compressor Motor And Condenser Motor — High Efficiency**

		Compressor Motor						Condenser Fan Motors					
Tons	Unit Model No.	No.	Volts	Phase	HP²	RPM	Amps¹		No.	Phase	HP²	Amps	
							RLA	LRA				FLA	LRA
3	YHC036A1	1	208-230	1	2.8	3450	16.1	88.0	1	1	.20	1.5	2.5
	YHC036A3	1	208-230	3	2.8	3450	10.7	77.0	1	1	.20	1.5	2.5
	YHC036A4	1	460	3	2.8	3450	5.8	39.0	1	1	.20	0.6	1.3
	YHC036AW	1	575	3	2.8	3450	4.4	31.0	1	1	.20	0.5	1.2
4	YHC048A1	1	208-230	1	3.5	3450	19.0	109.0	1	1	.33	2.0	6.6
	YHC048A3	1	208-230	3	3.5	3450	12.5	88.0	1	1	.33	2.0	6.6
	YHC048A4	1	460	3	3.5	3450	6.5	44.0	1	1	.33	1.2	2.5
	YHC048AW	1	575	3	3.5	3450	4.9	34.0	1	1	.33	0.7	1.5
5	YHC060A1	1	208-230	1	4.5	3450	25.0	169.0	1	1	.33	2.0	6.6
	YHC060A3	1	208-230	3	4.5	3450	17.4	124.0	1	1	.33	2.0	6.6
	YHC060A4	1	460	3	4.5	3450	7.8	59.6	1	1	.33	1.2	2.5
	YHC060AW	1	575	3	4.5	3450	6.2	49.4	1	1	.33	0.9	1.5
6	YHC072A3	1	208-230	3	5.7	3450	20.7	156	1	1	.70	3.85	9.30
	YHC072A4	1	460	3	5.7	3450	10	75	1	1	.70	2.50	5.80
	YHC072AW	1	575	3	5.7	3450	8.2	54	1	1	.70	1.54	3.60
7½	YHC092A3	2	208-230	3	3.5/3.3	3450	12.4/12.4	88/88	1	1	.70	3.85	9.30
	YHC092A4	2	460	3	3.5/3.3	3450	6.4/5.8	44/44	1	1	.70	2.50	5.80
	YHC092AW	2	575	3	3.5/3.3	3450	4.8/4.8	34/34	1	1	.70	1.54	3.60
8½	YHC102A3	2	208-230	3	3.9/3.5	3450	14.7/12.4	91/88	1	1	.75	4.0	9.4
	YHC102A4	2	460	3	3.9/3.5	3450	7.1/6.4	50/44	1	1	.75	2.8	6.8
	YHC102AW	2	575	3	3.9/3.5	3450	5.4/4.8	37/34	1	1	.75	2.4	6.2
10	YHC120A3	2	208-230	3	4.8/3.5	3450	17.3/12.4	124/88	1	1	.75	4.0	9.4
	YHC120A4	2	460	3	4.8/3.5	3450	9.0/6.4	59.6/44	1	1	.75	2.8	6.8
	YHC120AW	2	575	3	4.8/3.5	3450	7.1/4.8	49.4/34	1	1	.75	2.4	6.2

Notes:

1. Amp draw for each motor; multiply value by numbers of motors to determine total amps.
2. HP for each compressor.

# Electrical Data

**Table ED-7 — Electrical Characteristics — Inducer Motor**

Unit						
Model No.	Stages	HP	RPM	Volts	Phase	LRA
Y*C036-060A	1	1/35	3000	208-230	1	0.6
Y*C072A*L,M						
Y*C090,092,102A*L	1	1/35	3000/3000	208-230	1	0.6
Y*C072A*H						
Y*C090, 092,102A*M,H	2	1/15	3500	208-230	1	0.42
Y*C120A*L,M,H						

**Table ED-8— Electrical Characteristics — Power Exhaust**

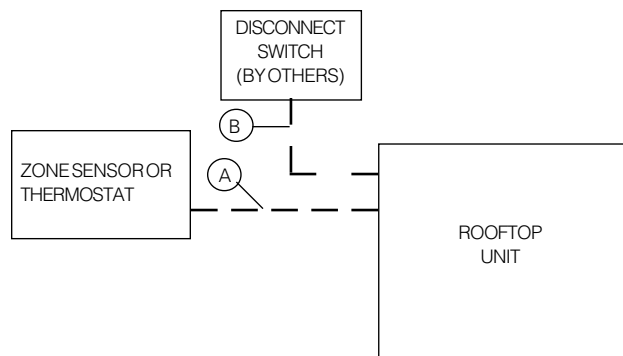
Tons	Volts	Phase	HP	RPM <sup>1</sup>	FLA	LRA
6-10	208-230	1	0.87	1075	5.7	16.3
6-10	460	1	0.87	1075	3.3	6.8
6-10	575	1	0.87	1075	2.3	5.4

Note:

1. Two speed.

# Jobsite Connections

---



## Typical Number Of Wires

### Zone Sensors

A— Manual Changeover .....	4
Manual/Auto Changeover .....	5
Manual/Auto Changeover with Status Indication LED's .....	10
Programmable Night Setback with Status Indication LED's .....	7

### Thermostats

A— 4 Wires, 24-volts	
B— 3 Power Wires + 1 Ground Wire (three phase) 2 Power Wires + 1 Ground Wire (single phase)	

For specific wiring information, see the installation instructions.

All wiring except power wires is low voltage.

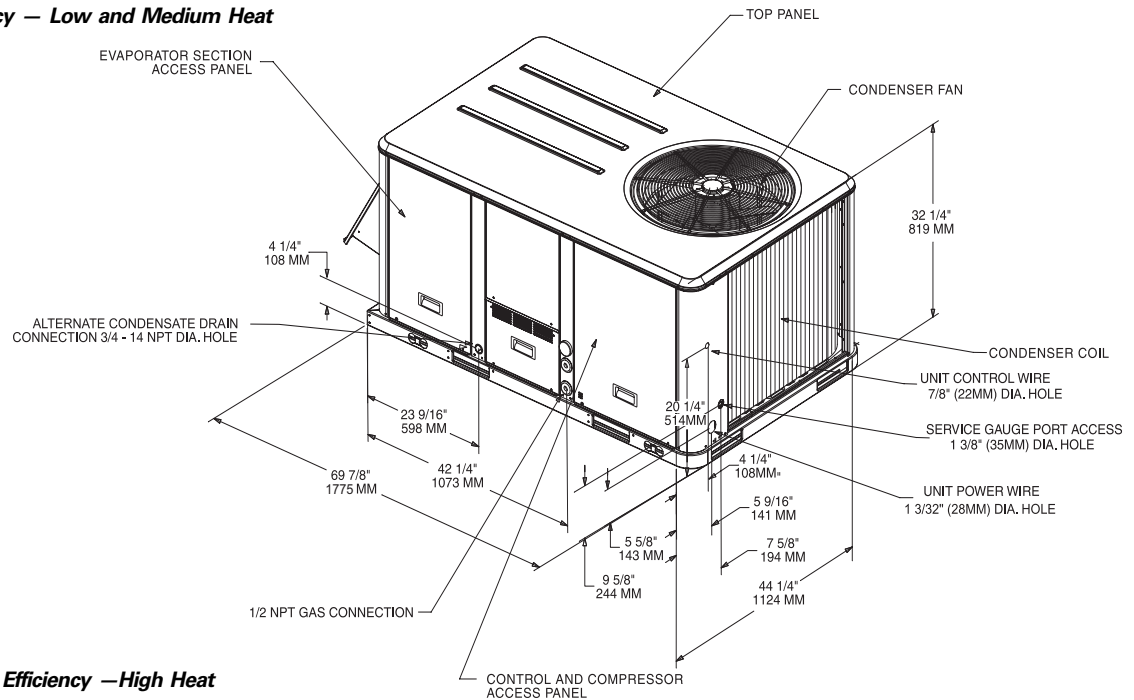
All customer supplied wiring to be copper and must conform to applicable electrical codes (such as NEC or CEC) and local electrical codes. Wiring shown dotted is to be furnished and installed by the customer.

# Dimensional Data

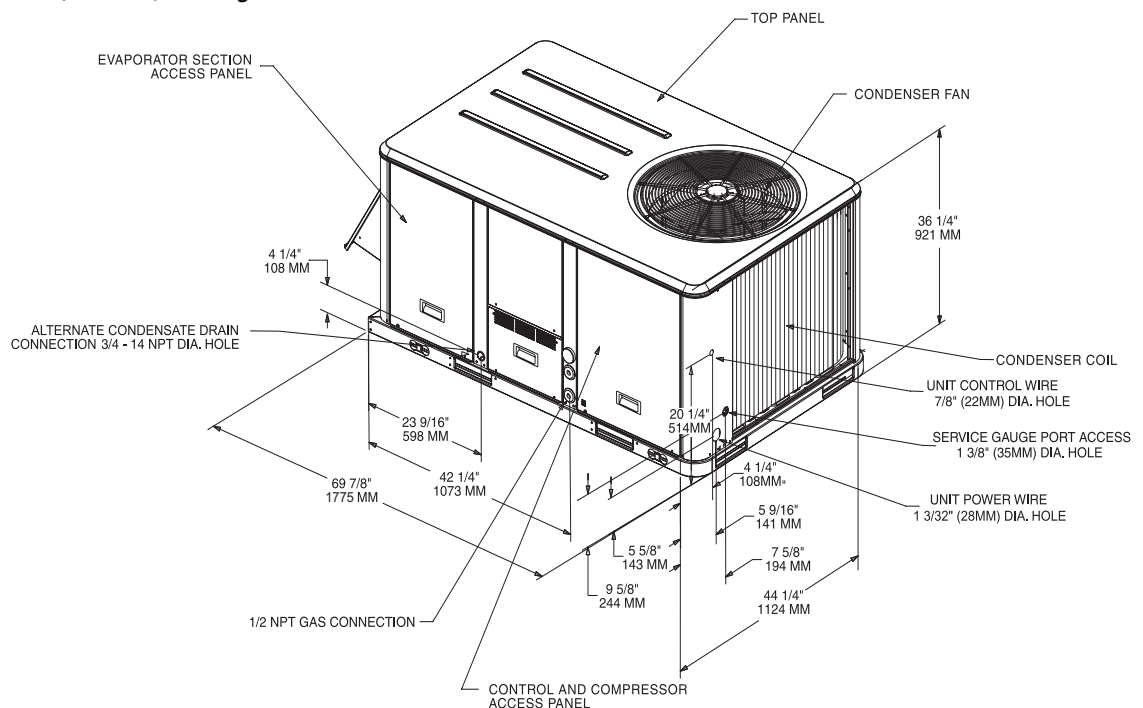
(3 - 5 Tons)

All dimensions are in inches/millimeters.

**3, 4, and 5 Ton Standard Efficiency — Low and Medium Heat**  
**3 and 4 Ton High Efficiency — Low and Medium Heat**



**3, 4, and 5 Ton Standard Efficiency — High Heat**  
**3 and 4 Ton High Efficiency — High Heat**  
**5 Ton — High Efficiency — Low, Medium, and High Heat**

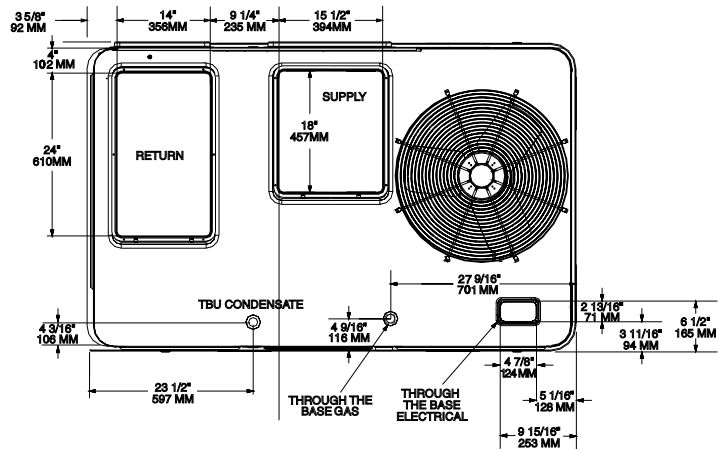


# Dimensional Data

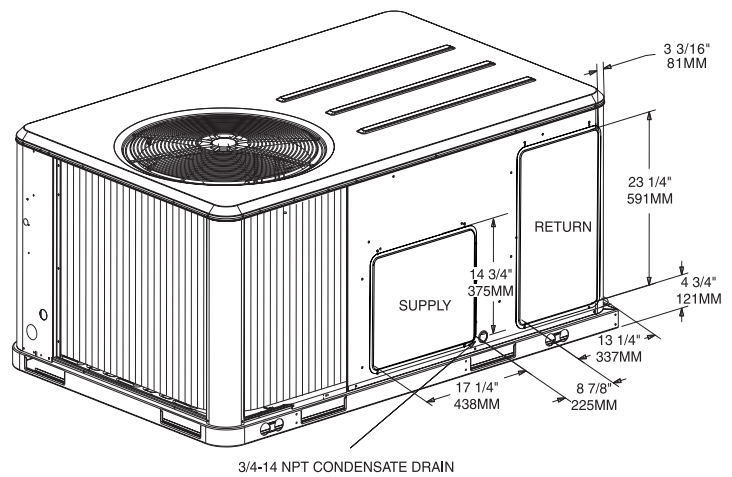
(3 - 5 Tons)

All dimensions are in inches/millimeters.

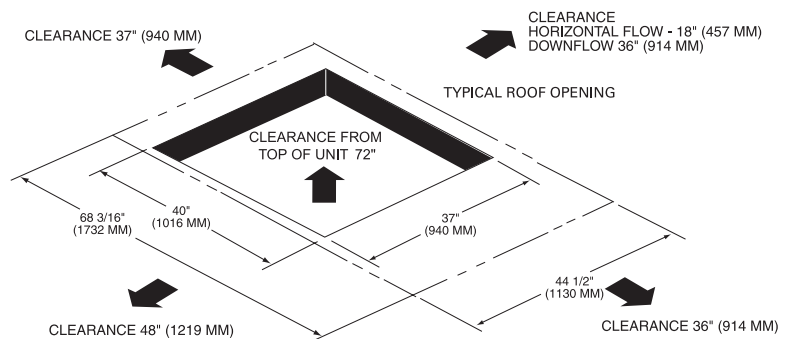
**3-5 Tons — Downflow Airflow Supply and Return;  
Through the Base Utilities**



**3-5 Tons — Horizontal Airflow Supply and  
Return**



**3-5 Tons — Unit Clearance and Roof Opening**





Technical drawing of the 1000 Series 1000W 1U Rack Mountable Power Supply Unit, showing dimensions and labels. The unit is a rectangular metal frame with a central cutout for a power supply. Dimensions are provided in inches and millimeters. Labels include "RETURN" and "SUPPLY" on the side panels, and "1000" on the front panel.

Dimensions (inches and millimeters):

- Top: 37 7/16" (950 MM), 25 3/16" (640 MM), 1 3/4" (45 MM), 14 9/16" (370 MM), 6 3/8" (162 MM), 61 3/4" (1568 MM), 65 3/16" (1656 MM)
- Right: 1" (25 MM), 16 3/4" (425 MM), 1" (25 MM)
- Bottom: 18 7/8" (479 MM), 40 3/4" (1034 MM), 41 7/16" (1052 MM), 2" (51 MM), 2" (51 MM)
- Left: 14" (356 MM), 1 3/4" (45 MM), 65 3/4" (1670 MM)

Labels:

- RETURN
- SUPPLY
- 1000

Technical drawing showing two rectangular boxes with dimensions in inches and millimeters:

- Box 1 (Left):
  - Length: 24 3/8" (619 MM)
  - Width: 14 1/16" (357 MM)
- Box 2 (Right):
  - Length: 16 3/16" (411 MM)
  - Width: 18 1/16" (459 MM)

Diagram illustrating the return and supply air registers. The return register is labeled "RETURN" and the supply register is labeled "SUPPLY". The distance between the registers is indicated as 14" (356 MM).

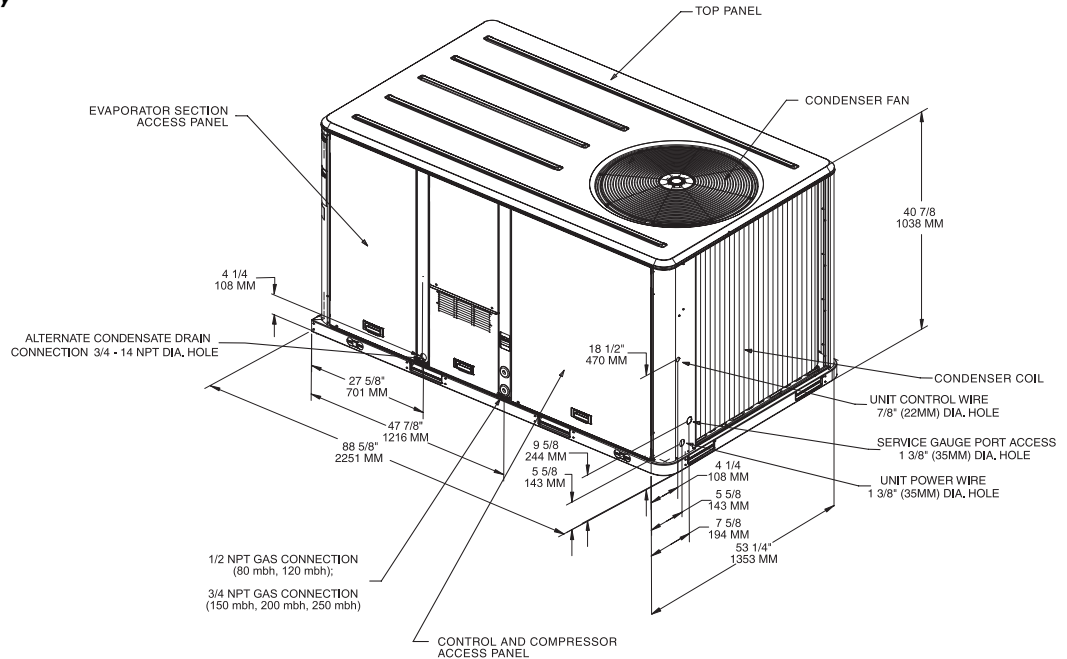


# Dimensional Data

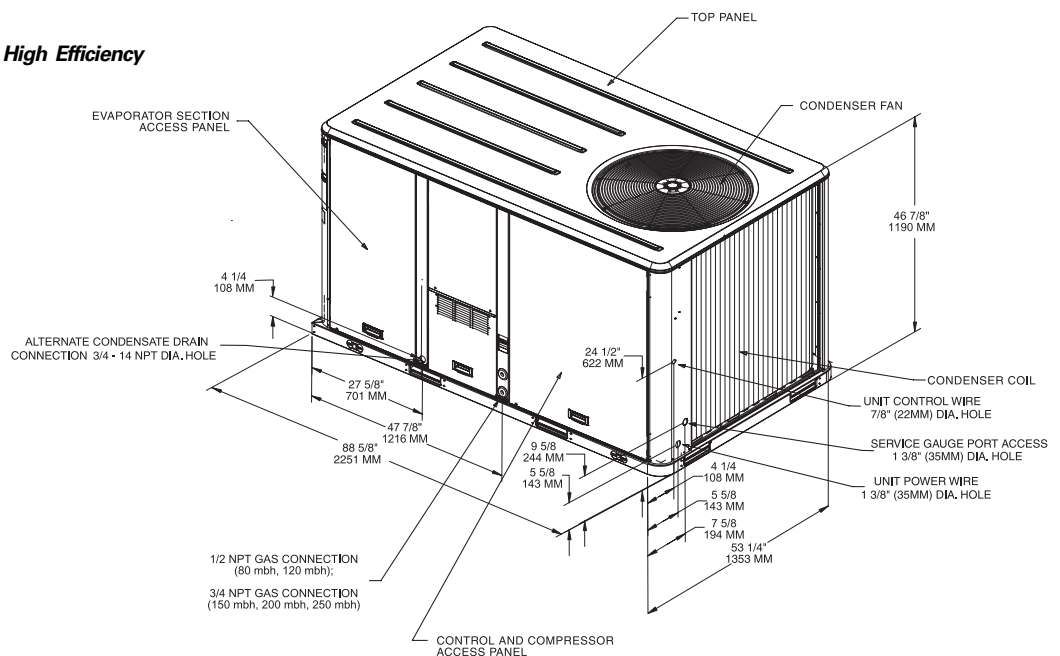
(6 - 10 Tons)

All dimensions are in inches/millimeters.

**6 Ton Standard and High Efficiency**  
**7½ Ton Standard Efficiency**



**7½ Ton High Efficiency**  
**8½ and 10 Ton Standard and High Efficiency**

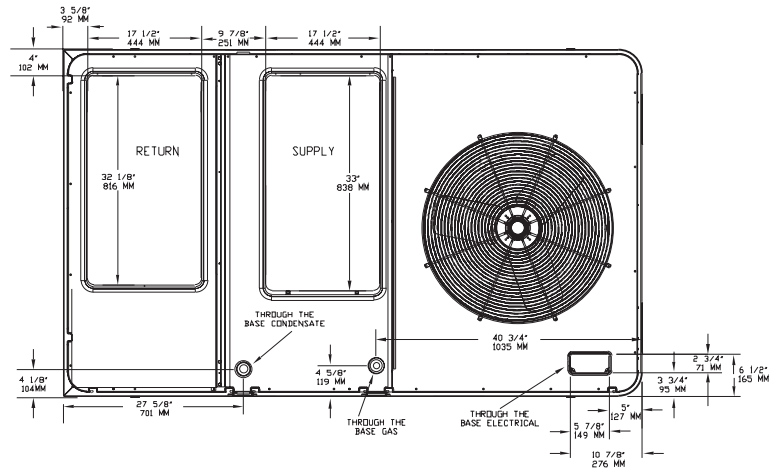


# Dimensional Data

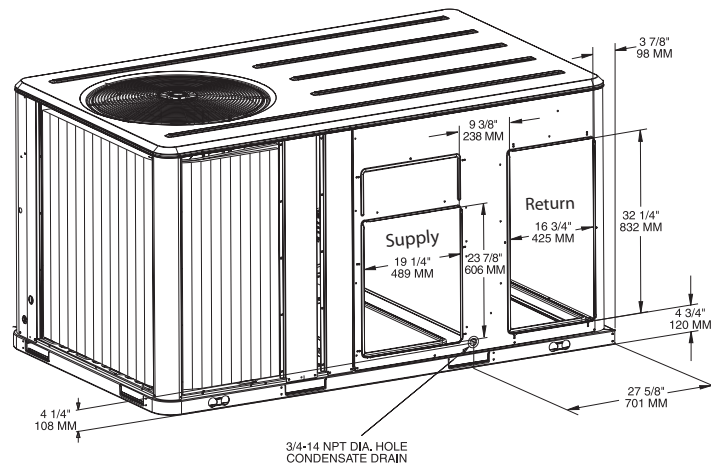
(6 - 10 Tons)

All dimensions are in inches/millimeters.

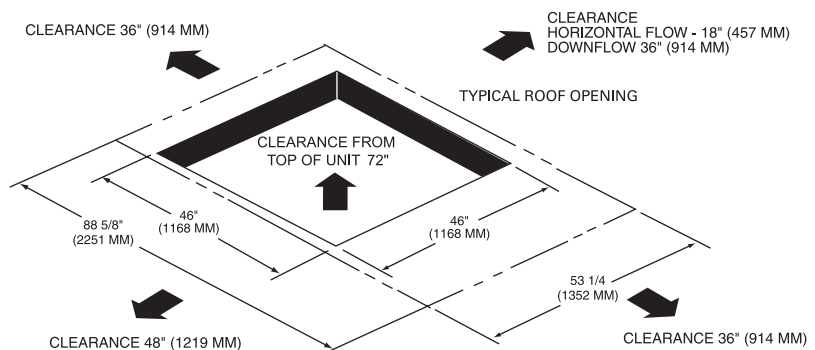
## 6-10 Tons — Downflow Airflow Supply and Return; Through the Base Utilities

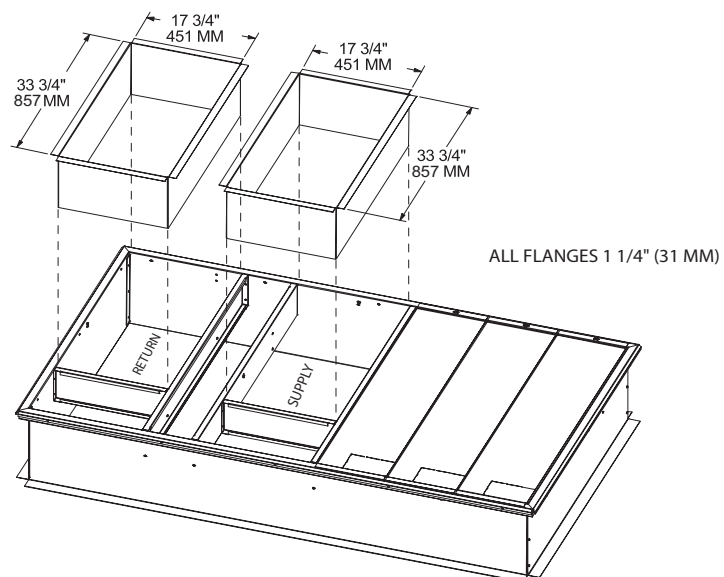


## 6-10 Tons — Horizontal Airflow Supply and Return



## 6-10 Tons — Unit Clearance and Roof Opening

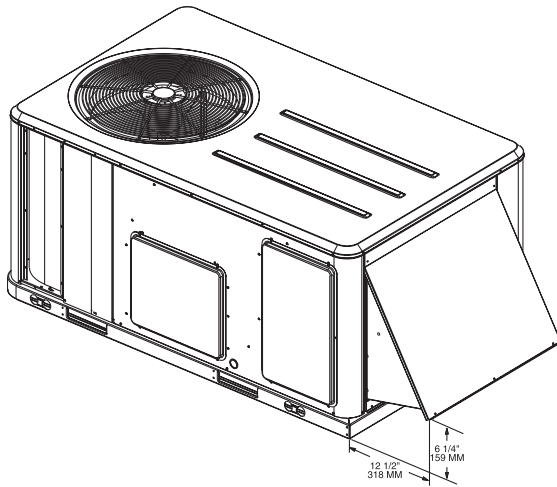




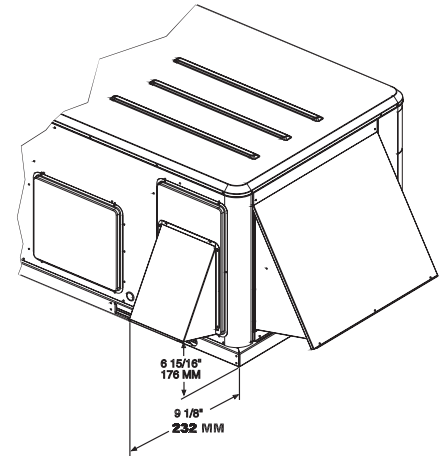
**6-10 Tons — Downflow Duct  
Connections — Field Fabricated**

# **Dimensional Data**

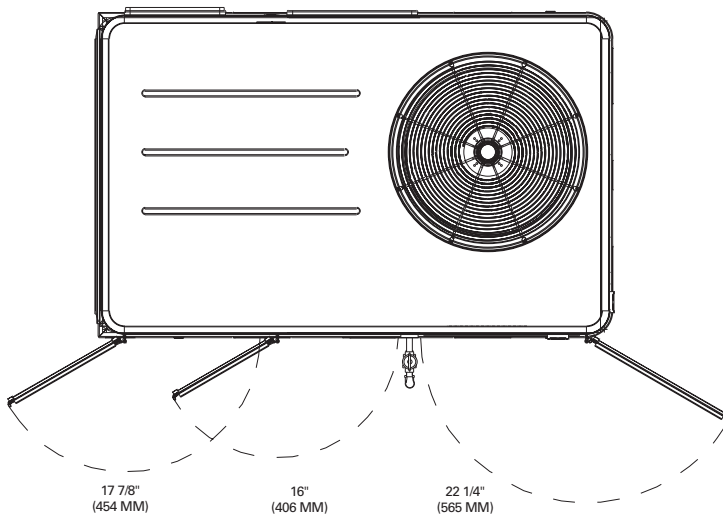
# **(3 - 5 Tons) Options/ Accessories**



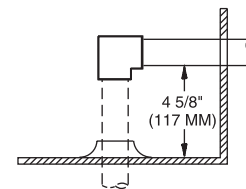
**3-5 Tons — Economizer, Manual, or Motorized Damper Hood**



**3-5 Tons — Barometric Relief Damper Hood**



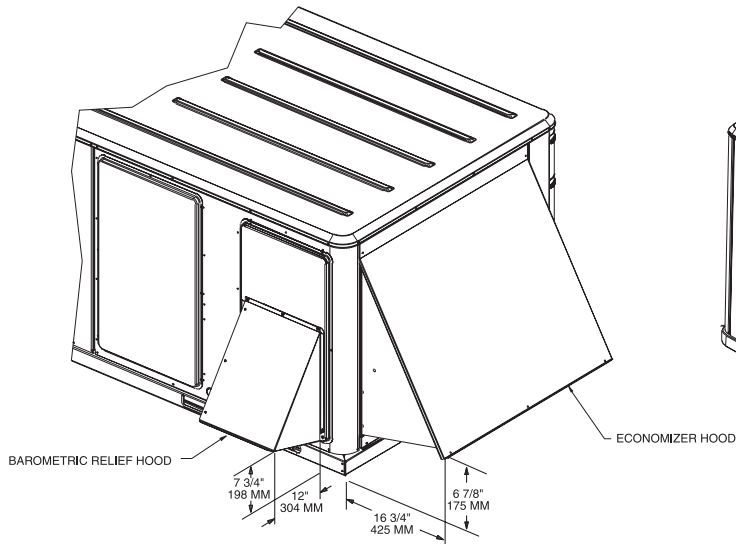
**3-5 Tons — Swing Diameter for Hinged Door(s) Option**



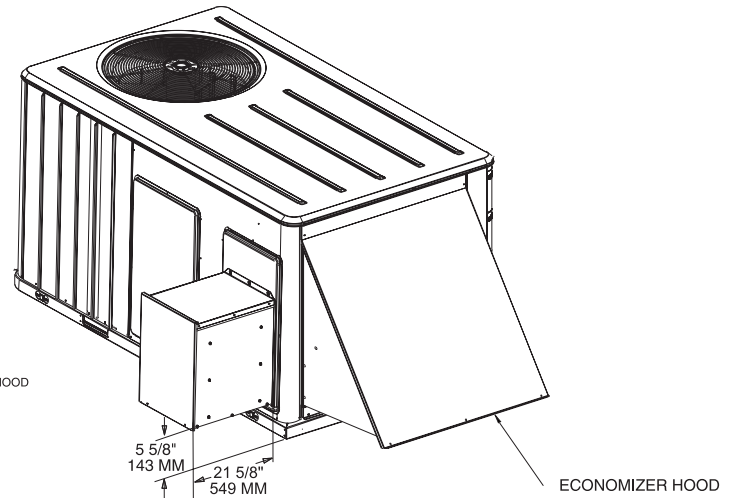
**3-5 Tons — Height of Gas Pipe required  
from Inside Base of Unit to Gas Shut off  
assembly (Factory Provided)**

# Dimensional Data

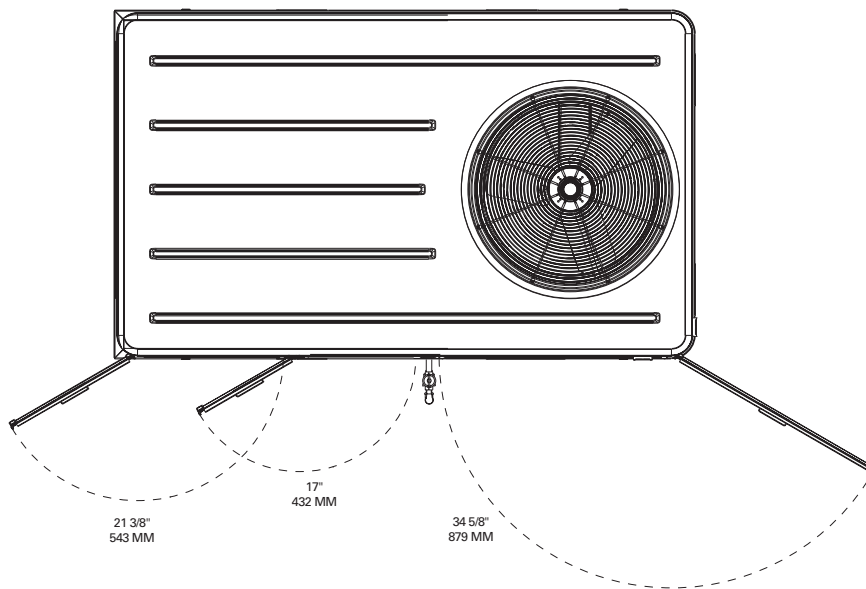
## (6 - 10 Tons) Options/Accessories



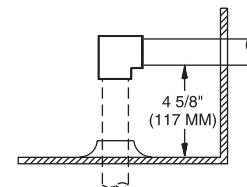
**6-10 Tons — Economizer and Barometric Relief Damper Hoods**



**6-10 Tons — Power Exhaust**



**6-10 Tons — Swing Diameter for Hinged Door(s) Option**



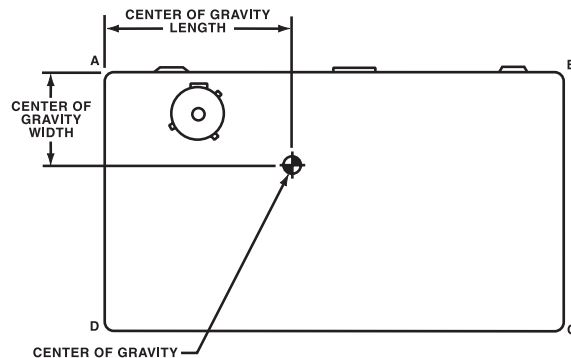
**6-10 Tons — Height of Gas Pipe required from Inside Base of Unit to Gas Shut off assembly (Factory Provided)**

# Weights

**Table W-1 — Maximum Unit And Corner Weights (Lbs) And Center Of Gravity Dimensions (In.)**

Tons	Unit Model No.	Maximum Weights (Lbs) <sup>2</sup>		Corner Weights (Lbs) <sup>1</sup>				Center of Gravity (In.)	
		Shipping	Net	A	B	C	D	Length	Width
3	YSC036A	572	480	151	124	96	109	32	19
	YHC036A	589	497	158	128	101	110	32	19
4	YSC048A	597	505	159	130	108	109	33	19
	YHC048A	631	539	166	133	114	126	32	20
5	YSC060A	614	522	169	134	105	114	32	18
	YHC060A	666	574	179	140	119	136	32	20
6	YSC072A	878	735	249	193	132	161	39	21
	YHC072A	915	772	249	198	141	184	39	22
7½	YSC090A	963	820	273	208	146	193	38	22
	YSC092A	965	822	277	222	147	175	40	21
	YHC092A	1066	923	306	243	165	210	39	22
8½	YSC102A	1042	899	297	243	165	194	40	21
	YHC102A	1100	957	310	252	175	220	40	22
10	YSC120A	1063	958	317	261	177	202	41	21
	YHC120A	1203	1060	342	277	197	245	40	22

- Notes:
1. Corner weights are given for information only.
  2. Weights are approximate.



**Table W-2 — Factory-installed Options Net Weights (Lbs)<sup>1,2</sup>**

Accessory	Net Weight	
	3-5 Tons	6-10 Tons
Economizer	26	36
Barometric Relief	7	10
Powered Exhaust	—	80
Motorized Outside Air Damper	20	30
Manual Outside Air Damper	16	26
Roof Curb	70	115
Oversized Motor	5	8
Belt Drive Motor	31	—
Smoke Detector, Return	7	7
Smoke Detector, Supply	5	5
Coil Guards	12	20
Hinged Doors	10	12
Powered Convenience Outlet	38	38
Through the Base Electrical	8	13
Through the Base Gas	5	5
Unit Mounted Circuit Breaker	5	5
Unit Mounted Disconnect	5	5
Novar Control	8	8
Dehumidification (Hot Gas Reheat) Coil	15	25

- Notes:
1. Weights for options not listed are < 5 lbs.
  2. Net weight should be added to unit weight when ordering factory-installed accessories.

# Mechanical Specifications

---

## General

The units shall be convertible airflow. The operating range shall be between 115°F and 0°F in cooling as standard from the factory for units with microprocessor controls. Operating range for units with electromechanical controls shall be between 115°F and 40°F. Cooling performance shall be rated in accordance with ARI testing procedures. All units shall be factory assembled, internally wired, fully charged with R-22, and 100 percent run tested to check cooling operation, fan and blower rotation, and control sequence before leaving the factory. Wiring internal to the unit shall be colored and numbered for simplified identification. Units shall be UL listed and labeled, classified in accordance to UL 1995/CAN/CSA No. 236-M90 for Central Cooling Air Conditioners. Canadian units shall be CSA Certified.

## Casing

Unit casing shall be constructed of zinc coated, heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, phosphatized, and finished with a weather-resistant baked enamel finish. Unit's surface shall be tested 1000 hours in a salt spray test in compliance with ASTM B117. Cabinet construction shall allow for all maintenance on one side of the unit. Service panels shall have lifting handles and be removed and reinstalled by removing only a single fastener while providing a water and air tight seal. All exposed vertical panels and top covers in the indoor air section shall be insulated with a cleanable foil-faced, fire-retardant permanent, odorless glass fiber material. The base of the unit shall be insulated with 1/2 inch, 1 pound density foil-faced, closed-cell material. All insulation edges shall be either captured or sealed. The unit's base pan shall have no penetrations within the perimeter of the curb other than the raised 1<sup>1</sup>/<sub>8</sub> inch high downflow supply/return openings to provide an added water integrity precaution, if the condensate drain backs up. The base of the unit shall have provisions for forklift and crane lifting, with forklift capabilities on three sides of the unit.

## Unit Top

The top cover shall be one piece construction or where seams exist, it shall be double-hemmed and gasket-sealed. The ribbed top adds extra strength and prevents water from pooling on unit top.

## Filters

One inch, throwaway filters shall be standard on all 3-5 ton units. The filter rack can be converted to two inch capability. Two inch filters shall be factory supplied on all 6-10 ton units. Optional 2-inch pleated filters shall be available.

## Compressors

All 3 ton standard units shall have direct-drive, hermetic, reciprocating type compressors. The reciprocating type compressors have a centrifugal oil pump providing positive lubrication to moving parts. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Crankcase heater, internal temperature, and current-sensitive motor overloads shall be included for maximum protection. Compressors shall have internal spring isolation and sound muffling to minimize vibration transmission and noise. Low pressure switches shall be standard.

3 ton high efficiency and 4-10 ton standard and high efficiency units shall have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Internal overloads shall be provided with the scroll compressors. Crankcase heaters shall be included on 7<sup>1</sup>/<sub>2</sub> ton standard efficiency units.

## Refrigerant Circuits

Each refrigerant circuit offers a choice of independent fixed orifice expansion devices or thermal expansion valve. Service pressure ports, and refrigerant line filter driers are factory-installed as standard. An area shall be provided for replacement suction line driers.

## Evaporator and Condenser Coils

Internally finned, 5/16" copper tubes mechanically bonded to a configured aluminum plate fin shall be standard. Coils shall be leak tested at the factory to ensure the pressure integrity. The evaporator coil and condenser coil shall be leak tested to 200 psig and pressure tested to 450 psig. The condenser coil shall have a patent pending 1+1+1 hybrid coil designed with slight gaps for ease of cleaning. A removeable, reversible, double-sloped condensate drain pan with provision for through the base condensate drain is standard.

## Gas Heating Section

The heating section shall have a progressive tubular heat exchanger design using stainless steel burners and corrosion resistant steel throughout. An induced draft combustion blower shall be used to pull the combustion products through the firing tubes. The heater shall use a direct spark ignition (DSI) system. On initial call for heat, the combustion blower shall purge the heat exchanger for 20 seconds before ignition. After three unsuccessful ignition attempts, the entire heating system shall be locked out until manually reset at the thermostat/zone sensor. Units shall be suitable for use with natural gas or propane (field-installed kit) and also comply with the California requirement for low NOx emissions.

## Outdoor Fans

The outdoor fan shall be direct-drive, statically and dynamically balanced, draw-through in the vertical discharge position. The fan motor shall be permanently lubricated and shall have built-in thermal overload protection.

## Indoor Fan

All 3-5 ton 3-phase units offer a choice of direct-drive, FC, centrifugal fans or belt driven, FC centrifugal fans with adjustable motor sheaves. 3-5 ton direct drive oversized motors shall be available for high static operations. All 6-10 ton units shall have belt drive motors with an adjustable idler-arm assembly for quick-adjustment to fan belts and motor sheaves. All motors shall be thermally protected. All indoor fan motors meet the U.S. Energy Policy Act of 1992 (EPACT).



# Mechanical Specifications

---

## Controls

Unit shall be completely factory-wired with necessary controls and contactor pressure lugs or terminal block for power wiring. Unit shall provide an external location for mounting a fused disconnect device.

A choice of microprocessor or electromechanical controls shall be available.

Microprocessor controls provide for all 24 volt control functions. The resident control algorithms shall make all heating, cooling, and/or ventilating decisions in response to electronic signals from sensors measuring indoor and outdoor temperatures. The control algorithm maintains accurate temperature control, minimizes drift from set point, and provides better building comfort. A centralized Microprocessor shall provide anti-short cycle timing and time delay between compressors to provide a higher level of machine protection.

24-volt electromechanical control circuit shall include control transformer and contactor pressure lugs for power wiring. Units shall have single point power entry as standard.

## Factory Installed Options

### Black Epoxy Pre-Coated Coils

The black epoxy coils have a thermoset vinyl coating that is bonded to the aluminum fin stock prior to the fin-stamping process. The pre-coated coils are an economical option for protection in mildly corrosive environments.

### Dehumidification Option

The dehumidification (hot gas reheat) option shall provide increased dehumidification. The option shall consist of a hot-gas reheat coil located on the leaving air side of the evaporator coil prepiped and circuited.

The option shall be equipped with crankcase heater(s), low pressure switch(es), Froststat™, and a thermostatic expansion valve(s) (TXV) as standard.

### High Pressure Cutout

This is offered for units that do not have High Pressure cutout as standard. All 3-phase units with scroll compressors include High Pressure Cutout as standard.

### Hinged Access Doors

Sheet metal hinges are available on the Filter/Evaporator, Supply Fan/Heat, and the Compressor/Control Access Doors.

### Novar Return Air Sensor

This option, when used in conjunction with Novar Controls, will contain a factory provided and wired zone temperature sensor located in the return air stream.

### Novar Unit Controls

Optional Novar rooftop unit controls shall be installed and tested. The Novar electronic thermostat module will interface to the unit microprocessor and will control the unit to the desired stage of cooling or heating.

## Phase Monitor

Phase monitor shall provide 100% protection for motors and compressors against problems caused by phase loss, phase imbalance, and phase reversal. Phase monitor is equipped with an LED that provides an ON or FAULT indicator.

### Powered or Unpowered Convenience Outlet

This is a GFCI, 120v/15amp, 2 plug, convenience outlet, either powered or unpowered. When the convenience outlet is powered, a service receptacle disconnect will be available. The convenience outlet is powered from the line side of the disconnect or circuit breaker, and therefore will not be affected by the position of the disconnect or circuit breaker. This option can only be ordered when the Through the Base Electrical with either the Disconnect Switch or Circuit Breaker option is ordered.

### Supply and/or Return Air Smoke Detector

With this option, if smoke is detected, all unit operation will be shut down. Reset will be manual at the unit. Return Air Smoke Detectors require minimum allowable airflow when used with certain models. See the Installation, Operation, and Maintenance (IOM) manual for the models affected and the minimum allowable airflow required. This option is available for microprocessor controlled units.

### Thermal Expansion Valve

All units shall have a short orifice refrigerate control metering device. For more exact refrigerant flow, when using unit in low airflow applications, a Thermal Expansion Valve option shall be available.

### Through the Base Electrical Access

An electrical service entrance shall be provided allowing electrical access for both control and main power connections inside the curb and through the base of the unit. Option will allow for field installation of liquid-tight conduit and an external field-installed disconnect switch.



# Mechanical Specifications

---

## Through the Base Electrical with Circuit Breaker

This option is a thermal magnetic, molded case, HACR Circuit Breaker with provisions for through the base electrical connections. The circuit breaker will be installed in a water tight enclosure in the unit with access through a swinging door. Wiring will be provided from the switch to the unit high voltage terminal block. The circuit breaker will provide overcurrent protection, be sized per NEC and UL guidelines, and be agency recognized by UL/CSA.

## Through the Base Electrical with Disconnect Switch

This 3-pole, molded case, disconnect switch with provisions for through the base electrical connections are available. The disconnect switch will be installed in the unit in a water tight enclosure with access through a swinging door. Wiring will be provided from the switch to the unit high voltage terminal block. The switch will be UL/CSA agency recognized. **Note:** The disconnect switch will be sized per NEC and UL guidelines but will not be used in place of unit overcurrent protection.

## Through the Base Gas Piping

The unit shall include a standard through the base gas provision. This option shall have all piping necessary including, black steel, manual gas shut-off valve, elbows, and union. The manual shut-off valve shall include a 1/8" NPT pressure tap. This assembly will require minor field labor to install.

## Two-Inch Pleated Filters

Two inch pleated media filters shall be available on all models.

## Factory or Field Installed Options

### Clogged Filter/Fan Failure Switch

A dedicated differential pressure switch is available to achieve active fan failure indication and/or clogged filter indication. These indications will be registered with either a zone sensor with status indication lights or an Integrated Comfort™ System. This option is available for microprocessor controlled units.

### Differential Pressure Switches

These sensors allow individual fan failure and dirty filter indication for microprocessor controlled units. The fan failure switch will disable all unit functions and "flash" the Service LED on the zone sensor. The dirty filter switch will light the Service LED on the zone sensor and will allow continued unit operation.

### Discharge Air Sensing

This option provides true discharge air sensing in heating models. This sensor is a status indicator readable through Tracer™ or Tracker™. This option is available for microprocessor controlled units.

### Economizer

This accessory shall be available with or without barometric relief. The assembly includes fully modulating 0-100 percent motor and dampers, minimum position setting, preset linkage, wiring harness with plug, spring return actuator and fixed dry bulb control. The barometric relief shall provide a pressure operated damper that shall be gravity closing and shall prohibit entrance of outside air during the equipment "off" cycle. Optional solid state or differential enthalpy control shall be available for either factory or field installation. The economizer arrives in the shipping position and shall be moved to the operating position by the installing contractor.

### Electric Heaters

Electric heat modules shall be available for installation within basic unit. Electric heater elements shall be constructed of heavy-duty nickel chromium elements internally delta connected for 240 volt, wye connected for 480 and 600 volt. Staging shall be achieved through ReliaTel™. Each heater package shall have automatically reset high limit control operating through heating element contactors. All heaters shall be individually fused from the factory, where required, and shall meet all NEC and CEC requirements when properly installed. Power assemblies shall provide single-point connection. Electric heat modules shall be UL listed or CSA certified.

### Frostat

This option is to be utilized as a safety device. The Frostat opens when temperatures on the evaporator coil fall below 10°F. The temperature will need to rise to 50°F before closing. This option should be utilized in low airflow or high outside air applications.

### LonTalk® Communication Interface

This option shall be provided to allow the unit to communicate as a Tracer™ LCI-R device or directly with generic LonTalk Network Building Automation System Controls.

### Oversized Motors

Direct drive oversized motors shall be available for high static applications.

### Reference or Comparative Enthalpy

Reference Enthalpy is used to measure and communicate outdoor humidity. The unit receives and uses this information to provide improved comfort cooling while using the economizer. Comparative Enthalpy measures and communicates humidity for both outdoor and return air conditions, and return air temperature. The unit receives and uses this information to maximize use of economizer cooling, and to provide maximum occupant comfort control. Reference or Comparative Enthalpy option shall be available when a factory or field installed Downflow Economizer is ordered. This option is available on all downflow models.

### Tool-less Hail Guards

Tool-less, hail protection quality coil guards are available for condenser coil protection.

### Trane Communication Interface

This option shall be provided to interface ReliaTel™ controlled units with the Trane Integrated Comfort™ systems.



# Mechanical Specifications

---

## Field Installed Options

### CO<sub>2</sub> Sensing

The CO<sub>2</sub> sensor shall have the ability to monitor space occupancy levels within the building by measuring the parts per million of CO<sub>2</sub> (Carbon Dioxide) in the air. As the CO<sub>2</sub> levels increase, the outside air damper modulates to meet the CO<sub>2</sub> space ventilation requirements.

### Digital Display Zone Sensor

The Digital LCD (Liquid Crystal Display) zone sensor has the look and functionality of standard zone sensors. This sensor includes a digital display of set point adjustment and space temperature in F (Fahrenheit) or C (Celsius). Includes FAN and SYSTEM buttons (supports the service functions of the standard sensor). E-squared memory stores last programmed set points. Requires 24 VAC (Volts AC). This sensor should be utilized with ReliaTel™ controls.

### Dual Thermistor Remote Zone Sensor

This sensor will allow the customer to reduce the total number of remote sensors to obtain space temperature averaging. This sensor should be utilized with ReliaTel controls.

### High Static Drive

The high static drive option shall allow the standard motor on the 6 and 7½ ton units to operate with improved external static capabilities.

### Humidity Sensor

This wall-mounted humidity sensor is used to control activation of the hot gas reheat dehumidification option. The humidity sensor can be set for humidity levels between 40% and 60% relative humidity by adjusting the ReliaTel Options Module.

### Humidity Sensor

This duct-mounted humidity sensor is used to control activation of the hot gas reheat dehumidification option. The humidity sensor can be set for humidity levels between 40% and 60% relative humidity by adjusting the ReliaTel Options Module.

### Manual Outside Air Damper

This rain hood and screen shall provide up to 50 percent outside air.

### Motorized Outside Air Dampers

Manually set outdoor air dampers shall provide up to 50 percent outside air. Once set, outdoor air dampers shall open to set position when indoor fan starts. The damper shall close to the full closed position when indoor fan shuts down.

### Powered Exhaust

The powered exhaust, available for 6-10 ton units, shall provide exhaust of return air, when using an economizer, to maintain better building pressurization.

### Remote Potentiometer

The minimum position setting of the economizer shall be adjusted with this accessory.

### Roof Curb

The roof curb shall be designed to mate with the unit's downflow supply and return and provide support and a water tight installation when installed properly. The roof curb design shall allow field-fabricated rectangular supply/return ductwork to be connected directly to the curb. Curb design shall comply with NRCA requirements. Curb shall be shipped knocked down for field assembly and shall include wood nailer strips.

### Thermostat

Two stage heating and cooling operation or one stage heating and cooling shall be available in either manual or automatic changeover. Automatic programmable electronic with night set back shall also be available.

### Ventilation Override Accessory

With the Ventilation Override Accessory installed, the unit can be set to transition up to 3 different pre-programmed sequences for Smoke Purge, Pressurization, and Exhaust. The transition occurs when a binary input on the RTOM is closed (shorted). This would typically be a hard wired relay output from a smoke detector or fire control panel. The ventilation override accessory shall be available as field installed.

### Zone Sensor

This control shall be provided to interface with the Micro equipped units and shall be available in either manual, automatic programmable with night setback, with system malfunction lights, or remote sensor options.





\*High Efficiency Units only



**TRANE®**

**Trane**  
**A business of American Standard Companies**  
**[www.trane.com](http://www.trane.com)**

For more information contact your local dealer  
(distributor), local district office, or e-mail us at  
[comfort@trane.com](mailto:comfort@trane.com)

---

Literature Order Number	RT-PRC006-EN
File Number	PL-UN-RT-YSC/YHC3-10TONS-PRC006-EN-10-04
Supersedes	PL-UN-RT-YSC/YHC3-10TONS-PRC006-EN-08-04
Stocking Location	10-04 Webb/Mason

---

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.